digital nova scotia

NOVA SCOTIA'S DIGITAL ECONOMY:

GROWTH, TALENT, & TRANSFORMATION

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Executive Summary

Nova Scotia's digital economy is a central pillar of the province's growth. It drives productivity, innovation, employment, and competitiveness within and across sectors and markets. While the province's "core" technology sector accounts for just over 6% of provincial GDP, the broader digital economy—including digitally intensive activity across industries—represents closer to 11% of total output. Moreover, the digital economy's economic footprint has rapidly accelerated over the last 10 years, an increase equivalent to the entire annual contribution of the province's fisheries sector. This reflects a major structural shift for Nova Scotia's economy: digital is no longer just a sector; it is a foundational economic layer that is embedded across industries, influencing how work is performed, how services are delivered, and how value is created and realized.

Along with its impact, the composition and maturity of Nova Scotia's digital economy has also evolved considerably over the past decade. What was once an ecosystem characterized primarily by early-stage companies and startups is now increasingly transitioning to a more mature environment focused on scaling, implementation, commercialization, and market expansion. This evolution is reflected not only in the growth and maturation of the province's technology ecosystem, but also in changing patterns of labour demand, investment activity, and technology adoption and integration across sectors.

The province's digital economy is both diverse and specialized. Alongside traditional ICT activities, Nova Scotia has developed strengths in areas such as ocean technology, clean technology, life sciences, and defence technology. This growth has been supported by several interconnected factors, including the development of collaborative innovation support systems, strong post-secondary institutions providing access to early-career talent, and sustained public and private investment in entrepreneurship, research, and product development. Although commercial activity is concentrated in Halifax, regional hubs play complementary roles in supporting technology adoption, economic development, workforce development, and rural innovation across the province.

Despite this progress, future growth is not guaranteed. Nova Scotia's digital economy is reaching a clear inflection point: while current conditions are likely sufficient to sustain incremental growth, realizing materially stronger outcomes requires addressing a series of structural constraints and better enabling a core set of long-term growth drivers. Notably, the digital ecosystem's future value and impact will depend heavily on investment intensity, enabling policy, technology diffusion, and access to skilled and experienced talent.

In fact, the economic modelling conducted for this study reveals that technology-related capital deepening is the strongest factor influencing future economic outcomes. Stronger investment in technology infrastructure, software, automation, computing capacity, and the scaling of innovative products and services will drive stronger growth across GDP, employment, wages, and productivity. Other variables, including labour supply and external market conditions, play important but more supportive roles.

Labour market dynamics further reinforce these findings. Demand for talent remains strong and sustained across both technical and business-oriented functions, including software engineering, data and analytics, business analysis, sales, project management, strategy, implementation, and product development. These patterns reflect an ecosystem that is not only developing technology but increasingly operationalizing and scaling it. In many respects, Nova Scotia's digital economy is evolving more quickly and operating at a higher level of sophistication than the broader provincial economy.

At the same time, the province's primary labour market constraint is increasingly one of depth of experience, not quantity. Employers consistently report challenges recruiting workers with mid- and senior-level experience, particularly those capable of leveraging technical expertise to drive product commercialization, sales, and market expansion. Moreover, employers generally describe a strong pipeline of early-career talent—and in some cases, oversaturation at the junior level. Skill mismatches are also evident within specific technical domains. For example, while demand for full-stack developers remains strong, employers report a shortage of workers with these broader capabilities, and an oversupply of front-end talent. Combined with broader shortages in mid- and senior-level experience, these mismatches make it difficult for firms to align local talent supply with more operationally mature roles. In turn, this constrains firms' ability to scale operations, commercialize products, and expand into new markets.

Worker sentiment reinforces many of these concerns. While workers typically felt secure and satisfied in their roles, and confidence in the future of Nova Scotia's digital economy remains generally positive, they also expressed greater uncertainty about long-term career progression opportunities and the province's ability to build enough critical mass to make staying appealing. Combined with a creeping affordability crisis, these dynamics contribute to elevated labour mobility and retention risks.

All told, Nova Scotia's digital economy presents significant opportunity, but faces some structural barriers that threaten to hold it back. The scenario analysis highlights the economic implications of failing to address these gaps: under baseline conditions, Nova Scotia risks forgoing more than $500 million in GDP and over 3,450 jobs by 2029 relative to higher-growth trajectories. Moreover, stronger growth scenarios are characterized by higher productivity gains and stronger wage growth, not just expanded economic output; in other words, the "spillover" effects reinforce and increasingly put upward pressure on GDP outcomes.

Ultimately, Nova Scotia's digital economy has matured significantly over the years and is well-positioned for continued growth. However, the scale and trajectory of that growth will depend on whether the province can successfully scale firms, deepen productivity, strengthen commercialization capacity, and attract and retain the experienced talent needed to support long-term expansion.

Introduction

Nova Scotia's digital economy is approaching a pivotal moment. As the global race for technological progress accelerates and technologies like artificial intelligence reshape the broader world of work, the province faces both significant opportunities and complex challenges.

The 2026–27 provincial budget identified "Artificial Intelligence and the Digital Economy" as one of its six priority sectors, marking a notable shift for a province historically associated with traditional industries such as agriculture, fisheries, and resource-based sectors. In many respects, this reflects the growing recognition that Nova Scotia's long-term economic competitiveness will increasingly depend on its ability to build, adopt, and scale digital technologies across the broader economy. Yet, realizing the full potential of the digital economy will require more than provincial prioritization alone. It depends on coordinated action across ecosystem partners to strengthen innovation, commercialization, talent development, technology adoption, and long-term economic competitiveness.

Research Objectives

This study was undertaken to develop a clearer and more comprehensive understanding of Nova Scotia's digital economy, including its size, composition, economic impact, labour market dynamics, and growth potential. The study also examines how digital technologies increasingly interact with and permeate the broader provincial economy, including their influence on productivity, output, workforce development, and industry competitiveness.

The analysis explores both the demand and supply sides of the labour market, including hiring trends, workforce composition, talent availability, job demand, skills gaps, labour mobility, and demographic representation. It also identifies constraints and emerging opportunities that shape the province's future trajectory, drawing on employer perspectives, worker insights, and broader ecosystem analysis.

Beyond benchmarking the current state, the study models different future growth scenarios to better understand how focusing on critical growth drivers could influence long-term outcomes across GDP, employment, wages, and productivity. The extent to which core structural drivers are activated or constrained shapes the scale of future outcomes.

Ultimately, the goal of the study is not only to better understand Nova Scotia's digital economy as it exists today, but to provide practical, evidence-based insights that can help strengthen the province's capacity to innovate, scale, and compete over the long term.

Research Methodology

This study takes a mixed-methods approach, integrating multiple sources of evidence to develop a comprehensive understanding of Nova Scotia's digital economy.

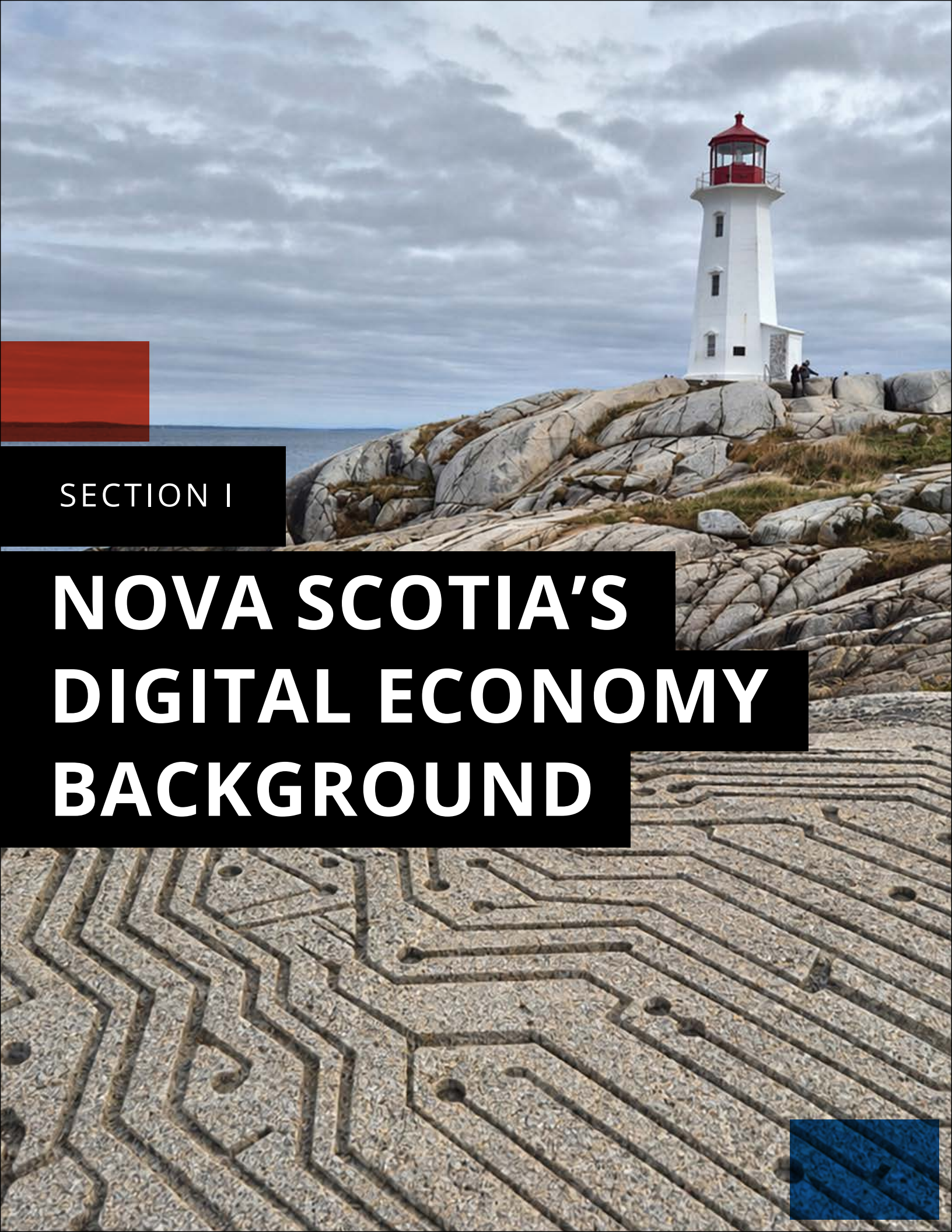
Secondary research activities included analysis of multi-year job postings data, relevant academic and grey literature, comparative benchmarking against peer jurisdictions, and broader economic and labour market datasets.

Primary research included an employer survey (n=73), an employee survey (n=557), key informant interviews (n=10), and an employer workshop (n=15), providing both demand- and supply-side perspectives across the ecosystem.

Report Structure

All told, this approach helps uncover what's happening, why it's happening, and what can or should come next. For a more detailed overview of Research Methods and Limitations, please see the Appendix.

- **Section 1** begins with an overview of the sector, detailing its composition, economic footprint, and comparative position relative to other jurisdictions.
- **Section 2** examines the demand-side labour market and economic dynamics, including hiring needs, in-demand roles and skills, and the opportunities and constraints that businesses navigate.
- **Section 3** complements demand-side analysis with a detailed view of labour supply, exploring worker profiles and demographic composition, employment conditions, perceptions of opportunity, and planned next steps.
- **Section 4** combines findings to present future growth scenarios, quantifying potential economic and labour outcomes according to baseline, moderate, and high-growth trajectories over the next three years. It also unravels the opportunity cost of inaction, or what Nova Scotia stands to lose by pursuing the status quo.
- **Section 5** concludes with an analysis of ecosystem enablers and gaps shaping Nova Scotia's digital economy. It highlights core levers that influence the province's long-term success, identifies where alignment and momentum are strongest, and examines the barriers and constraints that need to be addressed to unlock the full potential of the digital economy.



SECTION I

NOVA SCOTIA'S DIGITAL ECONOMY BACKGROUND

This section focuses on benchmarking the scale, structure, and economic impact of Nova Scotia's digital economy. It unravels the ecosystem's composition, its regional distribution, areas of specialization or competitive advantages, and its total economic footprint across the economy. It also explores the investment landscape and broader conditions that influence growth, competitiveness, and economic potential.

Defining the Digital Economy

Nova Scotia's digital economy is a blend of "core" information and communications technology (ICT) industries and a broader set of digitally intensive industries. At its core are sectors whose activities and outputs are predominantly digital by default, including software development, telecommunications, cloud and other digital infrastructure, data hosting, and digital media. Beyond this is a wider group of industries that vary in digital intensity, meaning they heavily leverage digital technologies to deliver products and services, enable automation and advanced analytics, and have data-driven systems that significantly influence how they operate and compete. This includes high-growth industries such as ocean technology, clean technology, life sciences, and defence technology, as well as advanced manufacturing, digital marketing, and more. An overview of the province's digital economy and the relative digital intensity of each industry is available in the Appendix.

Of course, the technology (ICT) sector forms the backbone of Nova Scotia's digital ecosystem. It drives and supports the broader development, storage, exchange, integration, and commercialization of digital products and services. However, limiting analysis to the ICT sector alone significantly understates the broader role and impact of digital technologies across Nova Scotia's economy. Increasingly, they are embedded across industries that may not traditionally be classified as "tech," but today rely heavily on digital foundations, including software, databases, cloud infrastructure, and automation technologies.

Digital Intensity Across Industries

Importantly, industries do not participate equally in the digital economy, and it is not feasible or realistic to label the entire economy as "digital". Rather, industries operate on a spectrum of digital intensity depending on the extent to which technologies and systems shape their products, operations, and business models.

For example, beyond the growth industries that will be described below, increasing levels of digital intensity are found across a range of industries:

Manufacturing increasingly relies on advanced modelling and analytics, automated workflows, digitally enabled production environments (e.g., digital twins), sensors, and advanced robotics. In an era marked by geopolitical uncertainty, supply chain disruption, and growing global competition, digital technologies are increasingly critical tools for supporting long-term competitiveness and market diversification. Recent analysis by EY Canada specifically highlights accelerating digitization as a "no regrets" move that Canadian manufacturers should make today to build resiliency and reduce future risk.[1]

Pharmaceutical manufacturing increasingly depends on advanced analytics, modelling, simulation, bioinformatics, and even AI for investment decisions and product development.[2] In many respects, digital technologies have long been a key lifeline for this industry, particularly given the high cost, complexity, and risk associated with pharmaceutical research and product development. AI may further disrupt this industry's business model: according to the McKinsey Global Institute (MGI), AI is expected to generate $60-110 billion in additional economic value per year, primarily through accelerated timelines for drug development, testing, approval, and marketing.[3]

Media, broadcasting, and broader creative industries are increasingly shaped by digital distribution models, streaming platforms, digital content workflows, digital marketing, and e-commerce and intelligent retail capabilities. While these industries were historically rooted in physical and broadcast-based delivery models, digital technologies now fundamentally shape how content is produced, distributed, monetized, and consumed. Recent research by Nielsen finds that nearly 45% of total global viewership was attributable to streaming services in May 2025, outpacing traditional broadcasting and cable for the first time.[4]

These varying levels of digital intensity demonstrate that the digital economy extends well beyond the technology sector. This distinction goes beyond semantics or the comparison of two definitions. Rather, it reflects two interconnected layers that together form Nova Scotia's broader digital economy: the core digital industries responsible for building and enabling digital technologies, and the broader set of digitally intensive industries increasingly transforming how those technologies are applied and generate value across the economy.

1 EY Canada, How Manufacturers Can Adapt For Success Amid Rising Geopolitical Uncertainty, January 17, 2023 . https://www.ey.com/en_ca/insights/advanced-manufacturing/how-manufacturers-can-adapt-for-success-amid-rising-geopolitical-uncertainty

2 Vera Malherio, Beatriz Santos, Ana Figueiras, Filipa Mascarenhas-Melo, The Potential of Artificial Intelligence in Pharmaceutical Innovation: From Drug Discovery to Clinical Trials, May 25, 2025, https://pmc.ncbi.nlm.nih.gov/articles/PMC12195710/

3 McKinsey & Company, Generative AI in the Pharmaceutical Industry: Moving from Hype to Reality, January 9, 2024, https://www.mckinsey.com/industries/life-sciences/our-insights/generative-ai-in-the-pharmaceutical-industry-moving-from-hype-to-reality

4 Nielsen, Streaming Reaches Historic TV Milestone, Eclipses Combined Broadcast and Cable Viewing for First Time, June 2025, https://www.nielsen.com/news-center/2025/streaming-reaches-historic-tv-milestone-eclipses-combined-broadcast-and-cable-viewing-for-first-time/

Ecosystem Composition & Regional Structure

Business Count & Industry Distribution

Nova Scotia's digital economy is simultaneously broad-reaching and meaningfully diversified. Analysis of Statistics Canada business counts identifies just under 1,500 technology firms operating in the province in 2025. This includes computer systems design and related services, management and technical consulting, scientific research and development services, and some broader professional and technical service activities.[5] Computer systems design and Management, scientific, and technical consulting services on their own account for nearly half of all firms, reinforcing the importance of software development, systems integration, cybersecurity, and IT consulting within Nova Scotia's broader digital economy.

Beyond core ICT activities, other digitally intensive industries play key roles. Telecommunications accounts for 138 firms, while scientific research and development services account for 86 firms. Creative industries also have a notable presence, including 89 motion picture and sound recording companies and 51 radio and television broadcasting firms. Advanced manufacturing-related industries comprise more than 120 firms.

NATIONAL AMERICAN INDUSTRY CLASSIFICATION SYSTEM (NAICS) CODE	NUMBER OF FIRMS (2025)
Chemical manufacturing [325] (excluding Pharma, 3254)	32
Computer and electronic product manufacturing [334]	29
Computer systems design and related services [5415]	384
Computing infra. providers, data processing, web hosting, related services [518]	28
Electrical equipment, appliance, and component manufacturing [335]	15
Machinery manufacturing [333]	43
Management, scientific, and technical consulting services [5416]	362
Motion picture and sound recording industries [512]	89
Pharmaceutical and medicine manufacturing [3254]	13
Publishing industries [513] (excluding Software, 5132)	35
Radio and television broadcasting stations [5161]	51
Scientific research and development services [5417]	86
Software publishers [5132]	25
Telecommunications [517]	138
Transportation equipment manufacturing [336]	87
Total	**1,417**

Table 1. Business count and industry distribution, Nova Scotia digital economy; source: Statistics Canada.

5 The broader Professional, Scientific, and Technical Services Industry (NAICS 54) cannot be labelled digital in its entirety. Although many activities in this sector demonstrate moderate to high levels of digital maturity, only select sub-industries have been included to ensure methodological accuracy or due to data suppression. For example, labelling the entire sector as "digital" would inflate firm counts to over 3,000 and, as a result, significantly overstate representation.

This composition reinforces the extent to which Nova Scotia's digital economy extends beyond the traditional boundaries of the technology sector. In terms of broader impact, Nova Scotia is the largest tech hub in Atlantic Canada, both in the total number of businesses and in the size of its workforce. By comparison, neighbouring New Brunswick is home to just over 300 technology firms.[6]

Firm Size and Maturity

Nova Scotia's digital economy is characterized by small and medium-sized businesses (SMBs), reflecting an overall entrepreneurial and innovation-driven ecosystem that is showing signs of operational maturity, while still evolving toward broader scale.

Analysis of Statistics Canada's business count data shows that over 73% of firms employ fewer than 10 workers; another 22% employ between 10 and 49. By contrast, just over 1.5% of firms employ more than 200 workers—a figure that is small but has grown over the years. This points to a digital economy that is dominated by startups and early-stage growth firms, but is steadily maturing and stabilizing. The respondents to the Employer Survey conducted in this study (discussed further in Section 2) skew somewhat toward more mature firms, reflecting a sampling bias toward established organizations with greater operational scale and capacity, as well as increased exposure to broader market and economic conditions.

Halifax As a Central Hub of Activity

Over time, Halifax has emerged as a major centre for startup activity and technology entrepreneurship within Atlantic Canada. According to the most recent data from CBRE, Halifax climbed three positions in a single year to rank as the #2 emerging tech market in North America out of 25 cities assessed.[7] Notably, Halifax was one of only three Canadian cities included in the ranking.

Factors influencing this growth included Halifax's relative affordability (historically) compared to larger Canadian and US technology hubs, a relatively young workforce, and a strong innovation culture supported by incubators, accelerators, government funding programs, and competitive tax and labour incentives. Organizations such as Volta, COVE, IGNITE, and Digital Nova Scotia were mentioned for collectively fostering a culture of innovation, experimentation, and entrepreneurship.

While a dollar-to-dollar analysis suggests relative "affordability" compared to larger Canadian and US technology hubs, a closer examination that factors in taxes, purchasing power, and housing availability shows that this advantage has eroded significantly in recent years.

6 Craig Simpson, "Buy NB's Tech, Build NB's Future", CollabHub Atlantic, May 20, 2026, https://collabhubatlantic.ca/news/buy-nbs-tech-build-nbs-future

7 CBRE, Scoring Tech Talent 2025, CBRE, Hosted by Digital Nova Scotia, https://digitalnovascotia.com/wp-content/uploads/2025/09/Scoring-Tech-Talent-2025_Final.pdf

Nova Scotia currently has the highest combined personal income and sales tax burden among Canadian provinces, increasing the relative cost pressures faced by both workers and employers. At the same time, rapidly rising housing costs and broader affordability challenges have weakened Halifax's historical cost advantage. For example, one comparison between Halifax and Toronto found that overall purchasing power was approximately 17.5% higher in Toronto despite Toronto's significantly higher (+9%) housing costs.[8]

Rapidly rising housing costs (particularly rents) and broader cost-of-living pressures (particularly cost of groceries and transportation) have played an outsized role in this shift. According to 2024 data from Statistics Canada, the median proportion of before-tax household income spent on housing and transportation in Halifax (30.7%) and Toronto (29.7%) was nearly equal.[9] Moreover, as affordability pressures intensify, they create a vicious cycle in which other structural challenges—including Nova Scotia's relatively high tax burden compared to other provinces— become increasingly pronounced. Combined, these factors play an important role in supporting domestic innovation and talent development, but also in the city's ability to attract and retain experienced talent.

It is undeniable that Nova Scotia has demonstrated considerable success in generating startups and supporting early-stage innovation in the digital economy. Over time, the province—and Halifax in particular—has developed a strong entrepreneurial and innovation ecosystem that increasingly punches above its weight relative to its size. Yet, accelerating and sustaining long-term growth requires more than startups; it requires a stronger, more mature ecosystem with the critical mass to support experienced career pathways, commercialization, investment attraction, and larger-scale market expansion.

Regional Hubs of Innovation

Despite Halifax's dominance, a number of smaller, regionally distributed innovation hubs also contribute to Nova Scotia's broader digital economy. While these ecosystems are less dense than Halifax's, they support specialization aligned with local industry strengths and regional economic development priorities.

Cape Breton is the province's second-largest regional innovation hub and, as of 2021, was home to 69 innovation-based startups, approximately 58% of which were concentrated within the broader technology ecosystem.[10] Growth in the region has been strongly supported by Cape Breton University and Nova Scotia Community College, both of which deliver programming and talent development in fields including technology, engineering, marine industries, and health.

8 Numbeo, Cost of Living Comparison between Halifax and Toronto, https://www.numbeo.com/cost-of-living/compare_cities.jsp?country1=Canada&city1=Halifax&country2=Canada&city2=Toronto

9 Statistics Canada, Housing and Transportation Cost Index (HTCI), 2025

10 Welcome to Cape Breton, Invest in Cape Breton, https://welcometocapebreton.ca/invest/technology-amp-innovation/

Innovation activity in Cape Breton is concentrated primarily around Sydney, with a strong emphasis on back-office operations and staff augmentation delivery models. In early 2026, the Cape Breton Business Innovation Centre was launched with support from the Department of Growth & Opportunities. According to Minister LeBlanc, "the centre will give entrepreneurs access to the expertise, networks, and tools they need to succeed, while helping attract and retain talent…".[11]

Other regional ecosystems also play an important role. In Truro and the broader Colchester region, innovation activity tends to focus on enabling small-business digitization and technology adoption, particularly in sectors like agriculture, environmental services, and advanced manufacturing. The Truro and Colchester Partnership for Economic Prosperity plays a key role, offering various funding and financial assistance programs for companies in the region. In Southwest Nova Scotia, organizations like IGNITE Atlantic have supported entrepreneurship, rural innovation, and the adoption of digital technologies in smaller communities and traditional industries. In spring 2025, the Department of Growth & Opportunities invested $1.6 million in the region over three years to support rural entrepreneurs, startup growth, and youth employment through programming.[12]

Unlike Halifax, many regional hubs focus more heavily on applied innovation, technology adoption, and the integration of digital tools into existing industries. Collectively, these ecosystems play an important role in extending the reach of Nova Scotia's digital economy beyond the urban core and supporting regional economic development and broader technology diffusion.

Urban-Rural Dynamics

A key factor shaping the province's broader digital economy is the relationship between geographic concentration, connectivity, and urban versus rural differences. While Halifax is the dominant centre for digital activity, according to the last Census, over 40% of the population lives in rural areas; Atlantic Canada had the highest rural household concentration of any region, and well above the national average (17.8%).[13]

Unsurprisingly, the OECD finds that rural innovation ecosystems do not—cannot and should not—compete directly with large urban technology centres. Instead, successful rural innovation systems tend to build around existing regional strengths, industries, and place-based advantages. Moreover, innovation in rural regions is likely to take non-traditional forms, including public-sector-based innovation, service delivery innovation, entrepreneurship, Indigenous-led innovation, and social innovation.[14]

11 More Support for Entrepreneurs, Businesses in Cape Breton, Invest Nova Scotia, January 12, 2026, https://investnovascotia.ca/news-and-stories/more-support-entrepreneurs-businesses-cape-breton

12 More Support for Rural Entrepreneurs, Startups, Youth, Government of Nova Scotia, May 5, 2025, https://news.novascotia.ca/en/2025/05/05/more-support-rural-entrepreneurs-startups-youth

13 Thomas Storring, Economics and Statistics, Government of Nova Scotia, February 9, 2022, https://novascotia.ca/finance/statistics/archive_news.asp?id=17529

14 OECD Rural Studies, Enhancing Rural Innovation in Canada, OECD, 2024, https://www.oecd.org/content/dam/oecd/en/publications/reports/2024/03/enhancing-rural-innovation-in-canada_f68182c2/a9919c66-en.pdf

Recent research by ICTC on rural innovation in Alberta corroborates this finding; the study suggests that rural regions do not necessarily "lag" behind urban ecosystems, but rather innovate differently. Moreover, local support ecosystems—including post-secondary institutions, accelerators, and other hubs—play an outsized role (compared to urban counterparts) in fostering innovation and entrepreneurship in rural communities.[15]

Irrespective of path or specialization, connectivity remains an important enabling condition within the rural system. Nova Scotia has made significant progress in expanding broadband access through initiatives like the Internet for Nova Scotia program and broader investments in connectivity infrastructure. Urban areas now have near-universal access to high-speed internet (99.28%), while connectivity in rural communities has improved substantially over the last several years (65.55%).[16] Moreover, the province's connectivity landscape and options have evolved with the emergence and increasing prevalence of low-earth-orbit satellite technologies such as Starlink. The Government of Nova Scotia has introduced incentives, such as the Satellite Internet Service Rebate Program, a one-time rebate of up to $1,000 to set up satellite internet[17], to close service gaps in rural and remote communities where traditional broadband infrastructure remains limited.

Overall, strengthening regional participation in the digital economy is not just about inclusion but also a key component of broader provincial productivity, workforce participation, and economic resilience. Nova Scotia's digital economy should not strive to function as a collection of competing hubs, but rather as an interconnected provincial system in which Halifax drives scale, investment, and commercialization, while regional and rural ecosystems broaden participation, support technology diffusion, and help extend economic value.

High-Growth Industries

Nova Scotia's digital economy is supported by a diverse mix of industries spanning both core ICT activities and emerging areas of specialization. The following provides an overview of key growth industries that contribute substantially to the diversification and long-term competitiveness of Nova Scotia's broader digital economy.

15 Alexandra Cutean, Mairead Matthews, Seeding Rural Innovation: Nurturing the Tech Frontier in Alberta, ICTC, October 4, 2023, https://ictc-ctic.ca/reports/seeding-rural-innovation

16 Report 2 – Connectivity in Rural and Remote Areas, Reports of the Auditor General of Canada, 2023, https://www.canada.ca/en/auditor-general/our-work/audit-reports/parl-oag-202303-02-e.html

17 Satellite Internet Service Rebate, Build Nova Scotia, https://internet.buildns.ca/satellite/

Ocean Technology Nova Scotia's most distinct specialization is ocean technology and the "blue economy". According to Invest Nova Scotia, the province is home to hundreds of ocean-tech firms, developing innovative products and services in areas such as marine robotics, autonomous underwater vehicles, subsea sensors, acoustic systems, and ocean data platforms. Because Nova Scotia has a strong naval and defence presence, the province has also developed a concentration of ocean technology companies that provide defence-adjacent solutions.[18]

A look across Canada reveals that Nova Scotia is home to the highest concentration of ocean technology companies in the country,[19] with support systems like the Centre for Ocean Ventures & Entrepreneurship (COVE) and Canada's Ocean Supercluster further bolstering the industry. These organizations deliver programs and support that startups need to hire talent, develop and commercialize IP, and expand their market share.

While ocean technology does not appear in Nova Scotia's 2024 or 2025 venture capital (VC) or private equity (PE) deal flows, it is supported by federal program funding and economic development positioning. ACOA investments show substantial support for marine research, aquaculture innovation, and ocean-related infrastructure.[20] In addition, Invest in Canada, Invest Nova Scotia, and local investors all identify ocean technology as a major growth opportunity.[21] According to analysts, key areas of activity include ocean monitoring systems, marine robotics, sustainable aquaculture, and marine engineering.[22]

Life Sciences According to Invest Nova Scotia, the province is home to over 100 life sciences companies, often supported by robust research institutions such as Dalhousie University's medical school and research labs, including the Brain Repair Centre. Non-profit organizations like Life Sciences Nova Scotia also play critical roles in delivering programming, resources, and other supports that enable industry growth and scale-up.

The life sciences sector is considered smaller in scale than other growth industries like ocean tech or clean tech, but it has made notable contributions to the innovation ecosystem, particularly in immunotherapy, neurology, and medical technology; according to the Nova Scotia Health Innovation Hub, the province is ranked first in Canada for active clinical trials per capita.[23]

Life sciences is one of Nova Scotia's most consistently active sectors across all forms of capital. In 2024, the sector accounted for six VC deals, and it continued to generate activity in 2025 with four VC deals by Q3.[24] Private equity data underscores the same pattern: seven of Nova Scotia's eight PE deals in 2025 were in life sciences.

18 Invest Nova Scotia, Ocean Technology, accessed April 17, 2026, https://investnovascotia.ca/our-high-growth-sectors/ocean-technology

19 Jonathan Coles, "Nova Scotia Has the Most Ocean Technology Companies in Canada. Here's Why", Invest Nova Scotia, March 3, 2026, https://investnovascotia.ca/news-and-stories/nova-scotia-has-most-ocean-technology-companies-canada-heres-why

20 "Proactive Disclosure," Government of Canada, November 21, 2025, https://search.open.canada.ca/grants/download/1e97a19b-bc62-4673-80d3-44ce156bba50

21 "Our High-Growth Sectors," 2025, Invest Nova Scotia, https://investnovascotia.ca/our-high-growth-sectors "Nova Scotia," 2025, Invest in Canada, https://www.investcanada.ca/nova-scotia; "Proactive Disclosure," Government of Canada, November 21, 2025, https://search.open.canada.ca/grants/download/1e97a19b-bc62-4673-80d3-44ce156bba50

22 "High-Growth Investment Options in Halifax," May 2025, Halifax Capital, https://halifaxcapital.ca/invest-halifax-tech-startups/

23 Nova Scotia Health Innovation Hub, Atlantic Clinical Trials Network, https://innovationhub.nshealth.ca/clinical-trials/atlantic-clinical-trials-network

24 2024 Canadian Venture Capital Market Overview, 2024 Canadian Private Equity Market Overview, Q3 2025 Canadian Private Equity Market Overview, Q3 2025 Canadian Venture Capital Market Overview

Life Sciences is also listed as one of the province's 12 high-growth sectors.[25] While it doesn't appear in VC or PE data, medical or health technology is highlighted by Invest in Canada and local tech analysts and investors.[26] Specific focus areas include digital health platforms, remote monitoring, healthcare workflow optimization, and device development.[27]

Clean Technology Clean tech is another major pillar of Nova Scotia's growth. The province's coastal and energy endowments make it a natural location for offshore wind, tidal and wave energy pilots, and energy storage and related smart-grid hydrogen projects. Several organizations support the growth of the clean technology industry in Nova Scotia; examples include the Fundy Ocean Research Centre for Energy (FORCE), Verschuren Centre for Sustainability in Energy and Environment, and Dalhousie University.[28]

Nova Scotia is home to over 170 clean tech companies, totalling a market cap of $220.9 million as of 2023.[29] The industry can be further disaggregated into 10 sub-industries[30], with the following five accounting for nearly 80% of all businesses: renewable and non-emitting energy supply; efficiency; smart grid and energy storage; precision agriculture, forestry, and biodiversity; and biofuels, bioenergy, and bioproducts.[31]

Enabling policy and net-zero commitments also drive the growth of Nova Scotia's clean technology industry. The province has set an ambitious GHG reduction target, aiming to reach 80% renewable electricity by 2030.[32] Private investment is also driving growth; for example, EverWind Fuels is moving ahead with a $6 billion green hydrogen and ammonia facility at Point Tupper, powered by roughly 2 GW of wind energy[33], making it one of the first gigawatt-scale green hydrogen projects in North America. Beyond wind, Nova Scotia is actively promoting the exploration of lithium, cobalt, manganese, and other battery materials. In 2025, the province released its Critical Minerals Strategy. Here, funding for exploration activities was seen as central to both economic growth and to diversifying the Canadian supply chain for critical clean energy technologies such as EV batteries and wind turbines.[34]

25 Our High-Growth Sectors," 2025, Invest Nova Scotia, https://investnovascotia.ca/our-high-growth-sectors

26 "Halifax Tech Startups: High-Growth Investment Options," May 1, 2025, Halifax Capital, https://halifaxcapital.ca/invest-halifax-tech-startups/; "Nova Scotia," 2025, Invest in Canada, https://www.investcanada.ca/nova-scotia.

27 "High-Growth Investment Options in Halifax," May 2025, Halifax Capital, https://halifaxcapital.ca/invest-halifax-tech-startups/

28 Invest Nova Scotia, Clean Technology, accessed April 17, 2026, https://investnovascotia.ca/our-high-growth-sectors/clean-technology

29 Natural Resources Canada, The Cleantech Sector in Nova Scotia (Ottawa: Government of Canada, 2025), https://natural-resources.canada.ca/sites/admin/files/documents/2025-07/NS-Cleantech_Profile_EN.pdf

30 Renewable and non-emitting energy supply; transportation; smart grid and energy storage; wage and recycling; air, environment, and remediation; precision agriculture, forestry, and biodiversity; biofuels, bioenergy, and bioproducts; energy efficiency; water and wastewater; mining, processing, materials, manufacturing, and industry

31 Natural Resources Canada, The Cleantech Sector in Nova Scotia (Ottawa: Government of Canada, 2025), https://natural-resources.canada.ca/sites/admin/files/documents/2025-07/NS-Cleantech_Profile_EN.pdf

32 Invest Nova Scotia, Clean Technology, accessed April 17, 2026, https://investnovascotia.ca/our-high-growth-sectors/clean-technology

33 Emma Penrod, "Canadian Company Cleared to Build $6B Green Hydrogen Facility with 2 GW Wind Farm", Utility Drive, February 14, 2024, https://www.utilitydive.com/news/everwind-green-hydrogen-wind-nova-scotia-eon-uniper/642688/

34 Invest Nova Scotia, Critical Minerals and Mining, Accessed April 17, 2026, https://investnovascotia.ca/our-high-growth-sectors/critical-minerals-and-mining

Clean technology is the top industry for private investment in the province. In 2024, four VC deals were in clean technology, and two additional deals were recorded in 2025.[35] ACOA funding also demonstrates sustained investment in emissions-reduction technologies, energy-efficiency upgrades, and environmental monitoring.[36] Both federal and provincial strategies position clean technology as a priority, highlighting opportunities in renewable energy, storage systems, and environmental analytics.[37] Local analysts also point to clean technology as a major industry for Nova Scotia, namely renewable energy technologies, environmental monitoring and management platforms, and clean transportation and logistics optimization systems.[38]

Defence Technology Nova Scotia has long played an important role in Canada's defence sector through its long-time strengths in marine, naval, and ocean-related activities. Halifax is home to Canada's Atlantic naval fleet and one of the country's most strategically important defence and shipbuilding hubs. It is driven by major players like CFB Halifax and Irving Shipbuilding and further bolstered by a broader ecosystem of marine engineering, advanced manufacturing, cybersecurity, sensing, and ocean technology firms.

While defence technology has not traditionally been viewed as a standalone pillar of Nova Scotia's digital economy (it has often shaded into other industries, such as ocean tech), this outlook is beginning to shift. Growing geopolitical instability, NATO modernization efforts, sovereignty priorities, cybersecurity threats, and increasing pressure on domestic defence procurement are all accelerating investment and interest in defence-related technologies. While still emerging, Nova Scotia is well-positioned to play a leading role in Canada's defence technology industry.

Nova Scotia also has a unique opportunity to contribute to this growing ecosystem on the talent front. The large concentration of Canadian Armed Forces (CAF) personnel, veterans, and defence contractors means the province has a strong pipeline of workers with significant experience and advanced skills in critical areas like cybersecurity, engineering, logistics, advanced operations, and machine and materials maintenance. Research completed by ICTC in partnership with COVE in 2022[39] found significant skill overlap between CAF veterans and high-demand occupations within Nova Scotia's ocean technology sector, in some cases exceeding 50%. Although the research is unpublished, the findings reinforce the extent to which the province's defence ecosystem also produces highly transferable talent.

In 2024, NATO's Defence Innovation Accelerator for the North Atlantic (DIANA) North American regional office was established in Halifax. NATO DIANA was created to accelerate the development of dual-use technologies that strengthen defence, security, and resilience across the Alliance, and Halifax now serves as NATO's primary North American innovation hub alongside DIANA's offices in London (UK) and Tallinn (Estonia).

35 2024 Canadian Venture Capital Market Overview, 2024 Canadian Private Equity Market Overview, Q3 2025 Canadian Private Equity Market Overview, Q3 2025 Canadian Venture Capital Market Overview

36 "Proactive Disclosure," Government of Canada, November 21, 2025, https://search.open.canada.ca/grants/download/1e97a19b-bc62-4673-80d3-44ce156bba50

37 "Nova Scotia," 2025, Invest in Canada, https://www.investcanada.ca/nova-scotia; "Our High-Growth Sectors," 2025, Invest Nova Scotia, https://investnovascotia.ca/our-high-growth-sectors

38 "High-Growth Investment Options in Halifax," May 2025, Halifax Capital, https://halifaxcapital.ca/invest-halifax-tech-startups/

39 COVE, Building the Veterans Career Pivot Program with ICTC, March 4, 2022, https://coveocean.com/news/building-the-veterans-career-pivot-program-with-the-ictc/

DIANA connects innovators, startups, researchers, test centres, accelerators, and investors across NATO member countries to bolster the global defence innovation ecosystem. To ensure long-term sustainability and to signal shared commitment, the federal government invested $26.6 million in the Halifax operation.[40]

Recent federal investments further reinforce this opportunity. In February 2026, ACOA announced $4 million in funding for nine projects in Nova Scotia through the Regional Defence Investment Initiative (RDII). This investment is intended to support organizations in developing advanced equipment and technologies, while also strengthening the participation of local firms in Canada's defence and security supply chains.[41]

Together, these industries highlight an important characteristic of Nova Scotia's digital economy: the province competes through specialization versus scale. Instead of attempting to replicate larger technology hubs, Nova Scotia's competitive advantage may rest at the intersection of technology and geographically rooted strengths.

Economic Footprint

GDP

According to the latest Statistics Canada data, Nova Scotia represented approximately 2% of Canada's total GDP in 2024, generating roughly $46.7 billion in economic output. Between 2015 and 2024, the province's GDP increased by more than 22%, significantly outpacing growth across the rest of Atlantic Canada, which collectively grew by approximately 9% over the same period. Today, Nova Scotia accounts for roughly 40% of the Atlantic region's total GDP, reinforcing its role as the primary economic engine.

GDP - Digital Economy; Nova Scotia and Rest of Atlantic (thousands)

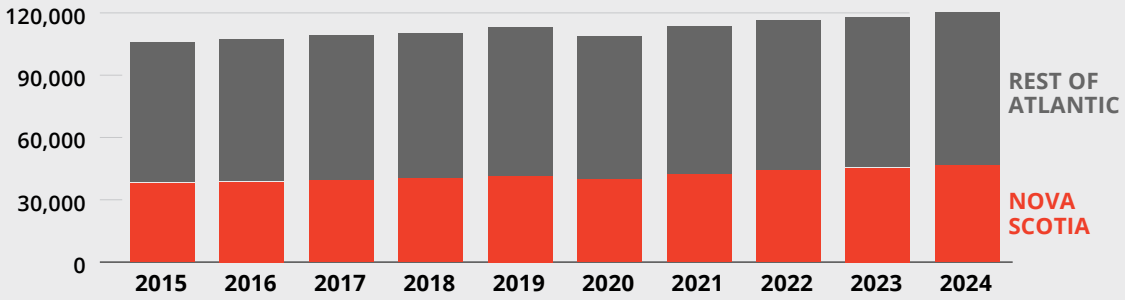


Figure 1: GDP 2015-2024, Nova Scotia vs Newfoundland & Labrador, Prince Edward Island, and New Brunswick combined (Rest of Atlantic); Source: Statistics Canada; custom digital economy definition.

40 NATO DIANA officially opens North American headquarters in Halifax, Government of Canada, October 2, 2024, https://www.canada.ca/en/department-national-defence/news/2024/10/nato-diana-officially-opens-north-american-headquarters-in-halifax.html

41 Atlantic Canada Opportunities Agency, "Strengthening Atlantic Canada's Defence Capabilities in Nova Scotia", Government of Canada, February 19, 2026, https://www.canada.ca/en/atlantic-canada-opportunities/news/2026/02/strengthening-atlantic-canadas-defence-capabilities-in-nova-scotia0.html

Within this broader context, the digital economy has emerged as one of Nova Scotia's most significant and fastest-growing economic drivers. In many respects, the sector has consistently "punched above its weight," generating an outsized contribution to provincial GDP relative to the province's size and population.

In 2024, Nova Scotia's core ICT sector accounted for approximately $2.96 billion in GDP, representing roughly 6.3% of total provincial economic output. When considering the broader digital economy, the footprint increases to approximately $4.94 billion, or 10.5% of provincial GDP. Put differently, more than one out of every ten dollars generated by Nova Scotia's economy is tied directly or indirectly to digital activity.

While the size and contribution of the digital economy in the other Atlantic provinces are not known, a zoom-in on the ICT sector shows that Nova Scotia accounts for approximately 80% of the Atlantic region's total technology GDP. It has also seen the highest growth of any province since the start of the pandemic, totalling over 20% (compared to 14%, 17.5%, and 11.5% in New Brunswick, Prince Edward Island, and Newfoundland, respectively).

Importantly, the broader digital economy's footprint within Nova Scotia has also expanded steadily over the last 15 years. Since 2010, the sector's share of provincial GDP has increased by more than 1.3%. While this may seem modest on first look, 1.3% of GDP is equivalent to the economic contribution of the province's fisheries sector and close to the province's agriculture sector—put otherwise, the growth in share of provincial GDP is comparable to the annual output of several industries traditionally viewed as foundational to Nova Scotia's economy.

Collectively, these trends reinforce the reality that digital activity is no longer peripheral. Instead, it has become a foundational driver of provincial productivity, innovation, investment, and long-term economic growth.

Portion of Nova Scotia's GDP - Technology Sector vs. Digital Economy

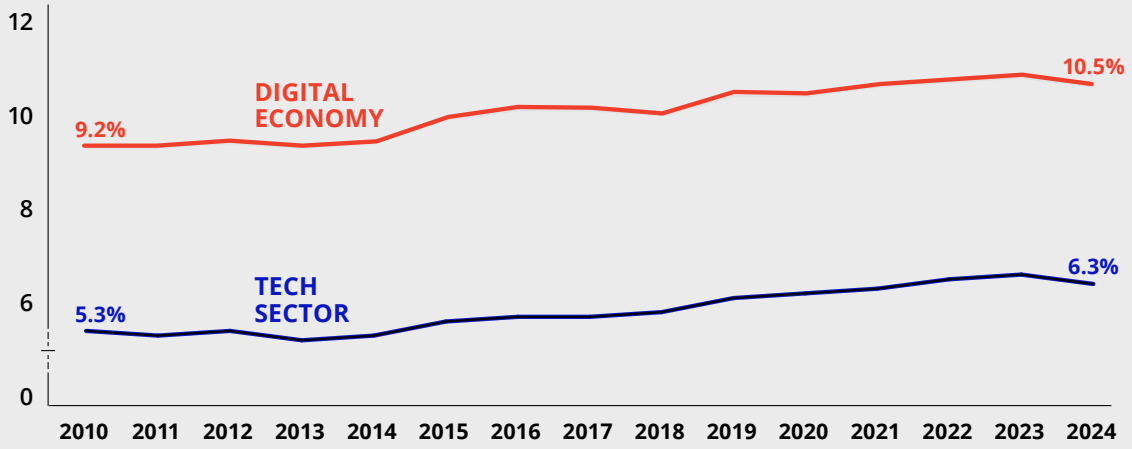


Figure 2: Tech sector and Digital economy as a portion of GDP, Nova Scotia, 2010-2024;
Source: Statistics Canada; custom digital economy definition.

Employment

As of 2025, average employment across Nova Scotia's economy totalled approximately 523,500. During the same period, over 37,000 people were employed within the province's digital economy, representing just over 7% of total provincial employment. Put differently, approximately one in every fourteen Nova Scotians now works in the digital economy. At the same time, unemployment within the digital economy remains significantly lower than across the broader provincial economy. In 2025, unemployment in Nova Scotia's digital economy averaged approximately 2.8%, compared to 6.6% across the province. This gap highlights both the continued demand for digital talent and the extent to which digitally intensive industries have become an increasingly stable and important source of employment.

Employment - Tech sector vs. Digital economy, Nova Scotia

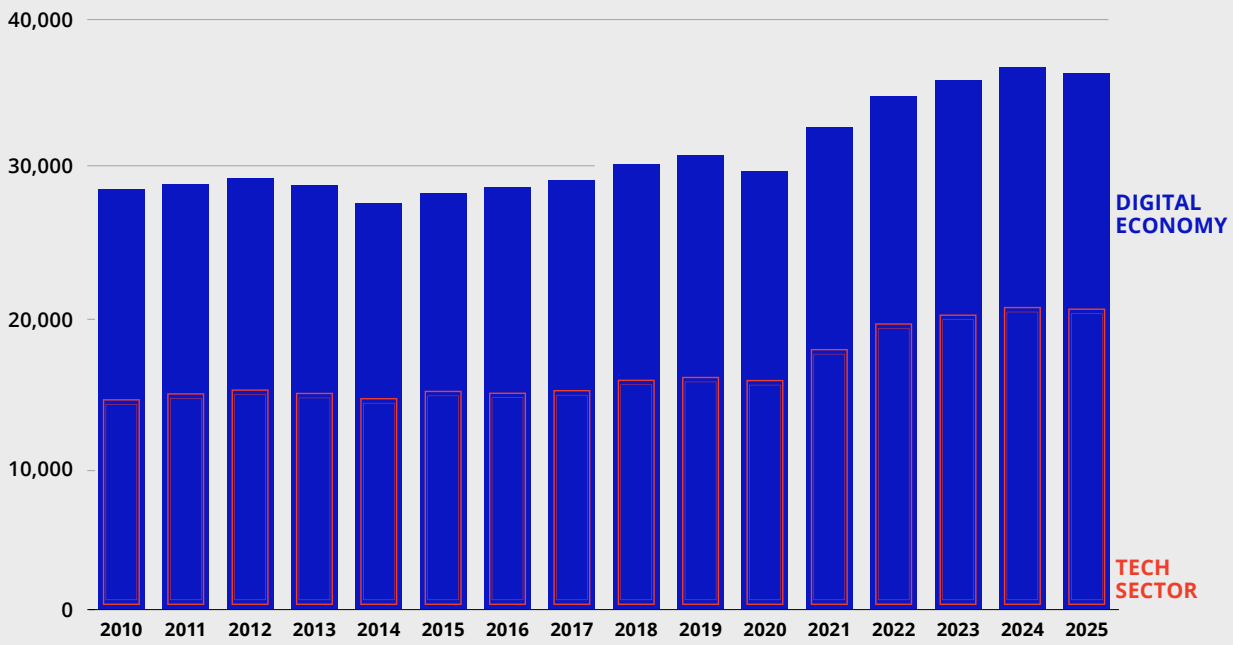


Figure 3: Tech sector and Digital economy employment, Nova Scotia, 2010-2025; source: Source: Statistics Canada; custom digital economy definition.

To further contextualize this, employment in the digital economy is now comparable to some of the province's largest and most economically significant sectors. For example, as of 2025, public administration—the fifth-largest sector in Nova Scotia by employment—employed just 900 more people than the digital economy.

SECTOR	EMPLOYMENT (ROUNDED)	
Digital economy	37,700	#6
Total, all industries	**523,500**	
Agriculture	3,600	
Forestry, fishing, mining, quarrying, oil and gas	11,000	
Utilities	4,600	
Construction	43,600	
Manufacturing	34,900	
Wholesale and retail trade	78,600	
Transportation and warehousing	24,000	
Finance, insurance, real estate, rental and leasing	30,200	
Professional, scientific, and technical services	37,100	
Business, building, and other support services	18,000	
Educational services	41,600	
Health care and social assistance	85,900	
Information, culture, and recreation	19,100	
Accommodation and food services	32,500	
Other services (except public admin)	20,200	
Public administration	38,600	

Table 2: Employment by sector, Nova Scotia, Statistics Canada; Source: Statistics Canada Labour Force Survey, custom digital economy definition. Note: some sectors are excluded.

Ten years of job posting data from Digital Nova Scotia reveals sustained demand across both highly technical occupations and business-oriented roles that support the development, implementation, and scaling of digital products and services. The five most in-demand occupations during this period were Software Engineers (specifically Full-stack Engineers), Business Analysts, Project Managers, and Data Engineers.

This distribution of demand paints an important picture of the province's digital economy. Demand is not concentrated solely in specialized technical occupations; the prominence of roles such as Business Analysts and Project Managers suggests that Nova Scotia's digital economy is not just developing technology products but also actively deploying them across organizations and industries.

Exports

In 2024, approximately 34 out of every 1,000 Nova Scotian businesses were "exporting firms"[42], representing a relatively strong concentration given the province's size. By comparison, Alberta, whose economy is approximately five times larger than Nova Scotia's, averaged 38.8 exporters per 1,000 firms during the same period. Collectively, the province's exporters generated $6.6 billion in goods sold to international markets.[43]

42 Innovation, Science, and Economic Development Canada, Key Small Business Statistics 2025, accessed April 17, 2026, https://ised-isde.canada.ca/site/sme-research-statistics/en/key-small-business-statistics/key-small-business-statistics-2025#fig2

43 Statistics Canada, "Table 12-10-0175-01: Labour force characteristics by industry, monthly, unadjusted for seasonality", Accessed April 17, 2026, https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1210017501&pickMembers%5B0%5D=1.4&pickMembers%5B1%5D=3.1&pickMembers%5B2%5D=4.1&cubeTimeFrame.startMonth=01&cubeTimeFrame.startYear=2024&cubeTimeFrame.endMonth=12&cubeTimeFrame.endYear=2024&referencePeriods=20240101%2C20241201

While comprehensive data on digital technology exports (particularly software and digital services) is not readily available, existing figures suggest that digitally intensive industries already contribute meaningfully. Approximately $280 million, or 4.25% of all Nova Scotia exports, came from electronic and electrical equipment and parts alone.[44] Admittedly, this significantly understates the true scale of digital exports. Traditional trade statistics are primarily designed to measure physical goods exports, whereas many digital service outputs—such as software, cloud services, cybersecurity solutions, data services, and embedded digital products—are captured within broader service categories or embedded within other industries entirely. As a result, much of the province's digital export activity remains structurally difficult to isolate using conventional provincial-level trade data. For a broader comparison, recent research by Innovation, Science, and Economic Development (ISED) Canada finds that ICT services exports accounted for more than three times the value of ICT goods in 2024, totalling $36.8 billion, versus $11.3 billion. The same ISED analysis also estimates that the share of ICT service exports now represents approximately 27% of the economy.[45]

In terms of destination, across industries, Nova Scotia's exports mainly go to the United States (approximately 70%), followed by China (approximately 5-8%, depending on the condition of certain commodities in a given year).[46] The remaining share is distributed across a range of international markets, with France, the United Kingdom, the Netherlands, Germany, and Japan accounting for notable portions of export activity. This is comparable to broader data on the destinations of all Canadian ICT exports: 67% going to the United States, 11.4% to Asia-Pacific, 10.6% to the European Union and the UK, and 11% to other regions in 2024.[47]

This concentration highlights both the strengths and vulnerabilities of Nova Scotia's (and Canada's) export economy. Strong integration with the United States provides clear advantages in terms of proximity, market scale, and established trade relationships. At the same time, heavy reliance on a relatively small number of export markets increases exposure to geopolitical tensions, trade disputes, regulatory changes, and broader global economic volatility.

These dynamics underscore the importance of strengthening export capacity and diversifying markets over the long term. Here, digital technologies are increasingly important enablers of export growth and market expansion, particularly for small and medium-sized businesses (SMBs). AI, in particular, is used by SMBs for export-related activities such as market research, customer segmentation, lead generation, partnership development, business case and proposal development, and outreach.[48]

44 Ibid

45 Innovation, Science, and Economic Development Canada, "Canadian ICT Sector Profile, 2024", https://ised-isde.canada.ca/site/digital-technologies-ict/en/canadian-ict-sector-profile

46 Nova Scotia Department of Finance and Treasury Board, "Nova Scotia International Goods Exports, July 2025", September 4, 2025, https://novascotia.ca/finance/statistics/news.asp?id=21312

47 Innovation, Science, and Economic Development Canada, "Canadian ICT Sector Profile, 2024", https://ised-isde.canada.ca/site/digital-technologies-ict/en/canadian-ict-sector-profile

48 Paul Cheek, "Empowering SME Exporters with AI: Bending the Vector of Growth & Societal Impact", Martin Trust Centre for Entrepreneurship, https://entrepreneurship.mit.edu/empowering-sme-exporters-with-ai-bending-the-vector-of-growth-societal-impact/

Digital Nova Scotia, in partnership with Opportunities New Brunswick, Innovate PEI, and St. Francis Xavier University, recently launched an "AI for Export" micro-credential bootcamp to help Nova Scotia SMEs leverage AI to support export readiness and growth. Initiatives like this reflect a broader shift in how digital technologies are increasingly functioning not only as export products but also as strategic enablers.

Investment & Capital Flows

Investment plays a central role in supporting the growth, maturity, and long-term competitiveness of Nova Scotia's digital economy. Across public funding, venture capital, foreign direct investment (FDI), and private equity, recent years have seen sustained investment activity across the ecosystem.

Public Investment & Ecosystem Development

Public-sector investment is a foundational driver of Nova Scotia's innovation ecosystem, particularly given the province's relatively small private capital market. The Atlantic Canada Opportunities Agency (ACOA) is a federal regional development agency that plays a central role in supporting economic growth in Atlantic Canada, including as a key source of investment in Nova Scotia's digital economy. While aggregated ACOA investments by year are not available, a review of funding commitments made over the last few years finds that between 2022 and 2025, ACOA invested approximately $142.6 million in innovation-focused activities in Nova Scotia.

A substantial share ($90 million or 63%) of this ACOA funding was directed toward the broader innovation ecosystem, or organizations and initiatives that create the conditions for long-term technological and economic development, as opposed to investments in innovative companies themselves. The recipients of this type of funding tend to include not-for-profit innovation organizations, research and policy institutes, university-based research centres, accelerators and incubators, and a range of community organizations engaged in sector development. As for the types of projects, funding went towards research on Atlantic economic trends, university-led studies and collaborations, and the development of hubs, networks, and sector associations that strengthen the region's innovation capacity. Many initiatives seek to help companies expand into new markets—such as international trade missions—while others develop programs to support entrepreneurs and industry clusters. Recipients of this funding included COVE, Volta, IGNITE, and Genome Atlantic.

The remaining $52.6 million (or 37%) flowed directly to industry, supporting firms and organizations engaged in commercialization, technology adoption and deployment, and applied innovation. In recent years, key projects have focused on AI-based enhancements to roadway safety systems, AI-enabled marine sensing, renewable energy projects, and seafood supply chain and logistics.

Regionally, Halifax accounted for $107.8 million, or 76% of the $142.6 committed. Cape Breton, meanwhile, saw $16 million in investment over the 4 years, while the Annapolis Valley saw $7.6 million, the Southern economic region saw $6.4 million, and the North Shore saw $4.8 million.

YEAR	ANNAPOLIS VALLEY	CAPE BRETON	HALIFAX	NORTH SHORE	SOUTHERN
2022	**$2.3M** 4.7%	**$12.9M** 26.0%	**$29.7M** 60.2%	**$2.9M** 5.8%	**$1.6M** 3.3%
2023	**$1.0M** 2.7%	**$1.2M** 3.3%	**$33.0M** 89.7%	**$0.2M** 0.4%	**$1.0M** 3.8%
2024	**$3.9M** 11.4%	**$1.1M** 3.3%	**$26.0M** 75.7%	**$0.7M** 2.0%	**$2.6M** 7.6%
2025	**$0.4M** 1.9%	**$0.7M** 3.4%	**$19.0M** 86.1%	**$1.1M** 5.0%	**$1.8M** 3.6%
Total	**$7.6M** 5%	**$16.0M** 11%	**$107.8M** 76%	**$4.8M** 3%	**$6.4M** 5%

Table 3. Innovation-focused ACOA spending per NS economic region per year, Source: ACOA aggregated funding over years.

Another notable source of investment activity in recent years has been Invest Nova Scotia. Based on custom analysis of publicly disclosed investment data and Invest Nova Scotia funding disclosures, the agency played an increasingly significant role within the province's ecosystem between 2024 and 2025. In 2024, Invest Nova Scotia provided approximately $8 million across six disclosed funding rounds. By the first three quarters of 2025, this role had expanded considerably, with approximately $38 million deployed across seven rounds, highlighting the growing importance of public-sector capital within Nova Scotia's innovation and commercialization ecosystem.

Venture Capital

Compared with larger Canadian markets, Nova Scotia's venture capital ecosystem remains comparatively small, though activity levels suggest a stable, growing early-stage investment environment. According to data from the Canadian Venture Capital and Private Equity Association (CVCA), Nova Scotia attracted approximately $79 million across 18 venture capital deals in 2024, representing just over 1% of total Canadian VC investment and 3% of national deal activity.[49] In 2025, the province attracted approximately $162 million across 11 deals, accounting for 2% of national capital invested and 1.9% of deal flow.[50] This time, the province ranked sixth in total deals and sixth in total dollars relative to other provinces.

Foreign Direct Investment (FDI) & Long-term Resilience

Nova Scotia is generally seen as a competitive jurisdiction for foreign direct investment (FDI), largely based on factors including location, human capital, innovation support systems, and, more recently, energy transition policy.[51]

- **Location:** From a market-access perspective, the province's Atlantic location and deep-water port assets—particularly the Port of Halifax—are strategic trade enablers. They offer reduced transit times to European and Asian markets and comparatively efficient container handling. This is also critically important in the context of trade network expansion; Global Affairs Canada identified four areas that are especially well-positioned to benefit from the Comprehensive Economic and Trade Agreement (CETA): fish and seafood products, agrifood and agricultural products, manufactured products, and chemicals and plastics.[52]
- **Human capital:** For Nova Scotia, the talent proposition primarily emphasizes the scale of post-secondary capacity (universities and community colleges) and a recent shift toward the production of science, technology, engineering, and mathematics (STEM) credentials. According to the Halifax Partnership, over 36,000 students enroll annually in 8 post-secondary institutions across the province.[53] Broader labour market "stability", however, is where Nova Scotia falls somewhat short: this is framed in terms of average worker tenure (i.e., ability to retain workers as they progress in their careers), creating a lower-churn workforce that reduces recruitment and training costs for inbound firms.
- **Innovation support systems:** Innovation capacity is institutionalized through Halifax's Innovation District, which operates as a localized ecosystem linking firms to research institutions, entrepreneurial networks, and commercialization supports. Beyond this, Nova Scotia also benefits from notable government investment and other ecosystem structures that support early-stage innovation.

49 "2024 Canadian Venture Capital and Private Equity Market Overviews", Canadian Venture Capital & Private Equity Association, 2024, https://www.cvca.ca/insights/market-reports/q4-2024/

50 "2024 Canadian Venture Capital and Private Equity Market Overviews", Canadian Venture Capital & Private Equity Association, 2024, https://www.cvca.ca/insights/market-reports/year-end-2025/

51 "Regional Spotlight: Nova Scotia," August 2024, Invest in Canada, https://www.investcanada.ca/news/regional-spotlight-nova-scotia.

52 "How CETA Will Benefit Nova Scotia", Global Affairs Canada.

53 "Why Halifax?" Halifax Partnership, https://halifaxpartnership.com/why-halifax/key-sectors/cleantech/

- **Energy transition:** Nova Scotia's target to reach ~80% renewable electricity by 2030 signals policy certainty for investors specializing in or linked to low-carbon value chains. This energy pathway underpins emerging opportunities in green hydrogen and ammonia, where coastal geography, wind resource quality, and enabling government posture are leveraged to attract large-scale international developers.

Overall, Nova Scotia is positioned as an export-connected, generally skilled, and decarbonizing investment platform; however, realized socio-economic outcomes are contingent on the extent to which FDI is structured to produce inclusive, locally retained, and accountable growth.

Based on custom analysis of FDI flows over the years, between 2013 and 2023, Nova Scotia secured 121 FDI projects, comprising both mergers and acquisitions (M&A) and net-new greenfield investments, with estimated capital expenditures of approximately $7.9B. Greenfield investments typically expand productive capacity and local employment directly, whereas M&A inflows may generate efficiency gains but can also shift ownership, strategic control, and profit repatriation patterns outside the province.

Benchmarking Against International Peers: Tech as a Driver

Assessing Nova Scotia's innovation ecosystem cannot be done in a vacuum. While the province shows notable promise and growth potential, an analysis against peer jurisdictions ultimately helps better anchor its true strengths and identify key areas of investment to accelerate progress.

To do this, a comparative analysis was completed, using five regions selected as credible comparators for Nova Scotia: Maine, New Hampshire, South-West Ireland, Wales, and Tasmania. These regions have a similar "shape" to Nova Scotia's economy and labour market, and oftentimes, face similar constraints and opportunities. These similarities are essential to ensure that comparisons are meaningful and relevant.

Nova Scotia operates in a highly comparable structural context to its peers. The regions are all small, coastal, and peripheral to national economic cores, with similar settlement patterns (one dominant metro plus dispersed rural towns) and shared demographic pressures (aging populations, seasonal economies, and—in some cases—recent in-migration). Human capital is also broadly aligned: Nova Scotia sits mid-pack on BA+ attainment, close to Wales and South-West Ireland and within a realistic range of the other peers. In short, the "playing field" is similar.

Where Nova Scotia diverges is in overall economic intensity and growth capacity. On GDP per capita, Nova Scotia sits below the US peers and Tasmania and closer to Wales, placing the overall economy in the lower-productivity tier of structurally similar regions. At the same time, Nova Scotia's labour market is looser than peers', with unemployment higher than in most comparator regions.

Taken together, these differences point to a province that shares a peer-level structure but produces less output per worker and has greater labour-market slack. The practical implications include:

- **A productivity gap:** Nova Scotia's economy is generating less value per person than most peers; closing the gap will require a stronger engine of high-value growth, targeted investments, and the ability to attract and retain high-skilled and experienced talent.
- **Labour slack and mismatch risk:** Higher unemployment suggests that the labour supply is somewhat misaligned with demand—either workers are not in roles aligned with growth sectors, or their experience and skills do not match industry requirements. This further reinforces the importance of upskilling and reskilling, and of leveraging novel pathways to fill the mid and senior talent gap.
- **Greater reliance on growth sectors:** With lower baseline productivity, Nova Scotia needs sectors that can both scale and drive spillovers into traditional industries. This further reinforces the need to capitalize on opportunities in high-growth industries to boost overall economic output.

While overall productivity and labour-market tightness are weaker in Nova Scotia, tech employment and tech GDP are like those of its peers. Put differently, tech is carrying a comparable share of employment and GDP even though the wider economy is operating at lower intensity. This suggests that tech is already functioning as one of Nova Scotia's more resilient, higher-value parts of the labour market and economy. Strengthening and scaling the province's digital economy is not just important for the sector itself; it is increasingly central to Nova Scotia's broader long-term economic growth, competitiveness, and productivity.

SECTION II

LABOUR MARKET & ECONOMIC DYNAMICS: UNDERSTANDING DEMAND

This section examines labour market and economic dynamics within Nova Scotia's digital economy. It focuses on current and emerging patterns in talent demand, skill needs, hiring pressures, workforce development, and broader perceptions of growth and the economic outlook. The analysis is grounded primarily in findings from the Employer Survey and employer interviews conducted as part of this study, and is complemented by secondary labour market data, job postings analysis, and additional research used to validate findings, fill gaps, and provide broader context.

Collectively, these findings provide insight into how Nova Scotia's digital economy is functioning today, where employers are experiencing the greatest opportunities and constraints, and how workforce and industry needs are expected to evolve over time.

The Employer Survey captured perspectives from firms operating across a range of digitally intensive industries and growth stages. Respondents skewed somewhat toward more established firms; this sample has a generally greater operational scale and maturity than Nova Scotia's broader business landscape: more than half of the responding firms classified themselves as "mature" organizations, characterized by stable year-over-year revenue growth, more than a decade in operation, and annual revenues of between $5 million and $20 million or more.

That said, most organizations were relatively small. Nearly 75% of respondents employed fewer than 100 people (Statistics Canada data indicates that approximately 70% of digital economy companies in Nova Scotia employ fewer than 50). While the sample therefore reflects the province's broader SMB-heavy business environment, the greater representation of operationally mature firms is important when interpreting findings.

Growth & Business Outlook

According to the Employer Survey, the business outlook for Nova Scotia's digital economy was generally positive: more than 75% of respondents believed it would experience moderate to strong growth over the next three years, with anticipated expansion ranging from 5% to over 20%. More established firms, especially, expressed a broadly positive outlook. In contrast, only a small minority of respondents (6.7%) anticipated a moderate decline.

Digital Economy Growth Outlook

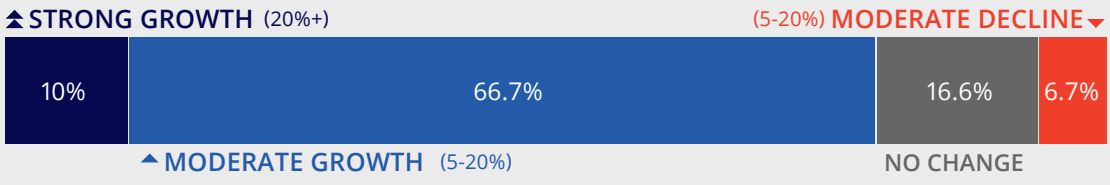


Figure 4: Business Outlook, Employer Survey, Jan-April 2026.

This positive outlook broadly aligns with wider business sentiment across Canada and Nova Scotia. While firms continue to navigate softer market conditions, inflation pressures, and geopolitical uncertainty, broader indicators suggest relative stabilization, not significant contraction. For example, in the most recent Business Outlook Survey by the Bank of Canada, expectations are modest but cautiously optimistic: the share of firms planning or budgeting for a recession over the next 12 months declined from 33% to 22% compared to the previous quarter, marking the lowest level observed in 2025.[54] Similarly, research by the Nova Scotia Finance and Treasury Board from March 2026 finds that approximately 65% of all Nova Scotian firms are somewhat to very optimistic about the business outlook over the next 12 months.[55]

When asked which areas of the digital economy are best positioned for growth in the near term, responses closely aligned with the high-growth sectors identified and discussed earlier in this report. Respondents highlighted ocean technology and the broader blue economy (20.5%) as the strongest near-term opportunity, followed by the general technology sector (19.3%). This was closely followed by aerospace and defence (18.2%), clean technology (17.1%), and life sciences (14.8%).

Nova Scotia Jobs and Revenue Drivers (1–3 Years)

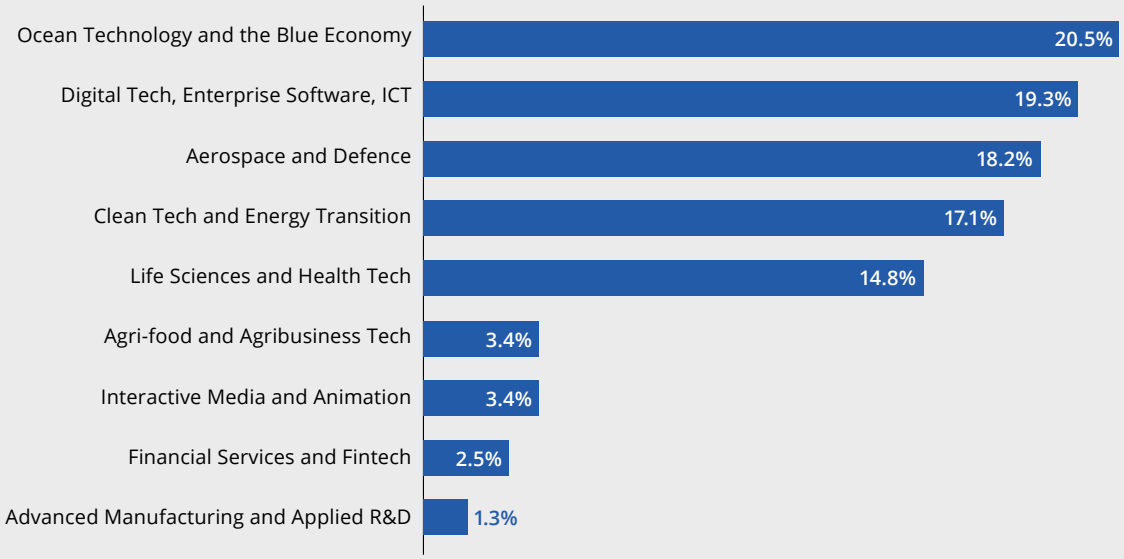


Figure 5: Jobs and Revenue Drivers, Employer Survey, Jan-April 2026.

54 Bank of Canada, Business Outlook Survey – Fourth Quarter of 2025, January 19, 2026, https://www.bankofcanada.ca/2026/01/business-outlook-survey-fourth-quarter-of-2025/

55 Thomas Storring, "Survey on Business Conditions – Q1 2026", Nova Scotia Finance and Treasury Board, March 2, 2026, https://novascotia.ca/finance/statistics/news.asp?id=21800

Asked about their own business (firm) prospects over the next year, respondents expressed a positive outlook, with the vast majority anticipating revenue growth. Approximately 17% expected strong growth of over 20%, while another 62% expected moderate growth in the range of 5-20%. No respondents anticipated a decline or negative growth over the coming year.

Importantly, respondents largely viewed growth as being driven by internal execution and commercialization rather than external supports. The most frequently cited business growth drivers were commercialization of new products and services, strategic partnerships, and growing demand within existing markets. Internal technology adoption and automation also ranked highly, alongside expansion into new markets.

By contrast, external enablers like government funding and improved access to capital were cited far less frequently. This suggests that many firms are increasingly focused on factors within their direct control, including innovation, commercialization, operational execution, strategic partnerships, and market expansion, rather than relying on broader ecosystem supports or public incentives.

The prominence of commercialization and IP-related strategies is particularly notable. In increasingly knowledge-driven economies, intangible assets like intellectual property are some of the most valuable and defensible assets businesses can build to support long-term competitiveness, differentiation, and growth.[56] IP is often used to shape market dynamics; in addition to advancing innovation, it creates barriers to entry, limiting competitors' access, strengthening incumbent firms' existing positioning within existing or new value chains.[57] In this sense, IP functions not only as an asset but also as a strategic lever for market control.

When asked about specific ecosystem supports or enablers of business success, respondents placed the greatest emphasis on workforce-related and cost-offset mechanisms. Tax credits, rebates, and workforce development or training supports were consistently identified as valuable. This was followed by support for innovation and commercialization, including incubators and accelerators, R&D incentives, and university or research partnerships.

56 James Andrew Lewis, Economic Growth in the Digital Economy: The Role of Intellectual Property and Innovation", Centre for Strategic and Intelligence Studies, May 19, 2021, https://www.csis.org/analysis/economic-growth-digital-economy-role-intellectual-property-and-innovation

57 PatentPC, "How Fortune 500 Companies Use IP to Dominate Markets", accessed April 17, 2026, https://patentpc.com/blog/how-fortune-500-companies-use-ip-to-dominate-markets

At the same time, a small but meaningful subset of respondents indicated that existing ecosystem supports are often difficult to navigate, inconsistently communicated, or poorly aligned with operational business realities. Open-ended responses surfaced concerns about complex procurement processes, fragmented programs, and inefficient pathways to accessing supports. This suggests that ecosystem gaps are not solely tied to the existence of services themselves, but increasingly about their discoverability and accessibility.

Hiring Outlook & Labour Market Conditions

Hiring expectations across Nova Scotia's digital economy remain generally positive despite broader labour market cooling across Canada. Changes in headcount over the previous three years varied, though overall trends point toward stabilization and moderate expansion rather than contraction. Approximately 37% of respondents reported stable or unchanged headcount since 2022, while 29% reported moderate growth of 5–20%. Approximately 21% reported moderate declines in headcount; notably, these responses were concentrated almost entirely among firms that identified themselves as scale-ups or mature enterprises.

While this finding may initially appear counterintuitive, it mirrors broader restructuring trends seen across North America's technology sector. Over the last several years, many mature technology firms—including several global market leaders—have undergone targeted workforce reductions as a result of various factors including changing market conditions, rising operational costs, shifting investment climates, over-hiring, and the acceleration of automation and AI. In some cases, these dynamics have directly affected Nova Scotia's ecosystem. For example, in January 2026, international video game giant Ubisoft shut its doors, laying off 71 employees in Halifax; the decision was framed as a cost-cutting measure, but it came weeks after local staff successfully voted to unionize, making it the first North American studio to do so.[58]

Headcount change over the past 3 years

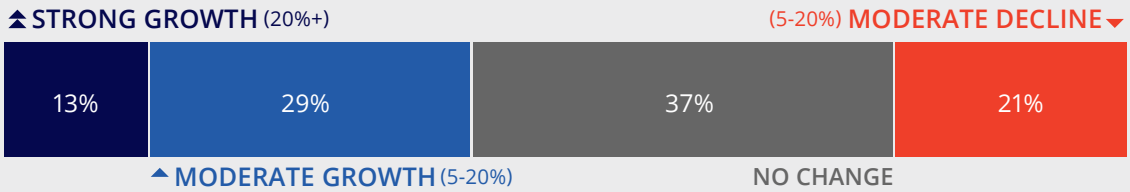


Figure 6: Hiring trends over the last three years, Employer Survey, Jan-April 2026.

58 CBC News, "Ubisoft Studio in Halifax Closes, 71 Jobs Lost", January 2026, https://www.cbc.ca/news/canada/nova-scotia/ubisoft-studio-halifax-closed-9.7036470

Despite these pressures, future hiring sentiment remains notably positive. Most respondents (72%) expect moderate headcount growth, with a 5-20% increase. Notably, none reported plans to reduce hiring or "cut headcount" in future, despite likely challenging economic circumstances ahead and a cooling investment climate.

These findings are particularly notable when compared against broader Canadian labour market conditions during the first quarter of 2026. Canada shed 95,000 jobs, while unemployment climbed to 6.7%. In Nova Scotia, unemployment remained even higher at roughly 6.8%.[59] By contrast, unemployment within the province's digital economy remained substantially lower at approximately 3% during the same period.

Interview and workshop participants broadly echoed the moderate expansion reflected in the survey results. Most firms anticipated measured hiring growth tied to specific operational priorities, business units, or strategic initiatives rather than broad workforce expansion. Where stronger growth expectations existed, they were typically associated with targeted initiatives like standing up new AI teams, expanding specialized delivery capabilities, or entering new markets.

Hiring Expectations over the Next 12 Months

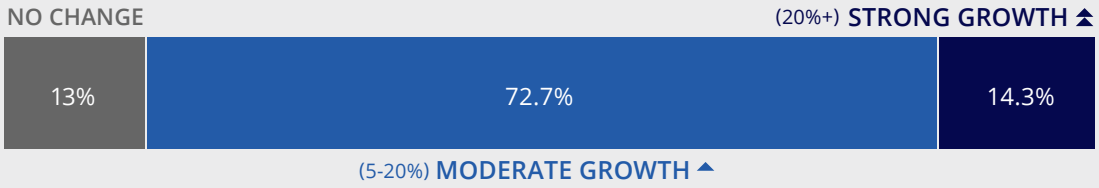


Figure 7: Hiring expectations over the next 12 months, Employer Survey, Jan-April 2026.

Overall, hiring conditions across Nova Scotia's digital economy reflect cautious but continued expansion, in line with broader labour market sentiment across the tech ecosystem and the economy. According to Robert Half's 2026 "Demand for Skilled Talent" report, nearly 50% of hiring managers across Canada's technology ecosystem plan to modestly increase headcount in 2026 (5% growth).[60] According to the Bank of Canada's most recent Business Outlook survey, most firms reference soft demand in the marketplace, maintaining that their current physical capacity and workforce are sufficient.[61]

59 Statistics Canada, Labour Force Survey, January – March 2026.

60 Robert Half, Demand for Skilled Talent, accessed April 17, 2026, https://www.roberthalf.com/ca/en/insights/salary-hiring-trends/demand-for-skilled-talent/tech-it

61 Bank of Canada, Business Outlook Survey—Fourth Quarter of 2025, January 2026, https://www.bankofcanada.ca/2026/01/business-outlook-survey-fourth-quarter-of-2025/

In-Demand Jobs

When asked to describe the roles they most need, employers most often cited software roles (20%), followed by sales, marketing, and customer success roles (17%), data, AI, and other quantitative analysis roles (13%), and management roles (12%).

Mirroring broader results from Digital Nova Scotia's job posting data, this showcases a relatively diverse distribution of demand. Here, demand is not concentrated among technical talent only; it spans the full lifecycle of digital product and service development and delivery, from engaging clients and stakeholders, defining and prototyping products, building solutions, bringing them to market, and engaging customers.

Importantly, the strong presence of go-to-market and management roles again signals a maturing ecosystem. With many firms seeking these roles—and often at a senior level—this suggests that they are actively scaling, selling, and operationalizing the products or services they have developed. This mirrors broader labour market insights on in-demand jobs in established markets; a recent Randstad report finds that Sales Representatives are among the top 15 most in-demand jobs in Canada in 2026.[62]

Top Roles: 2026 Hiring

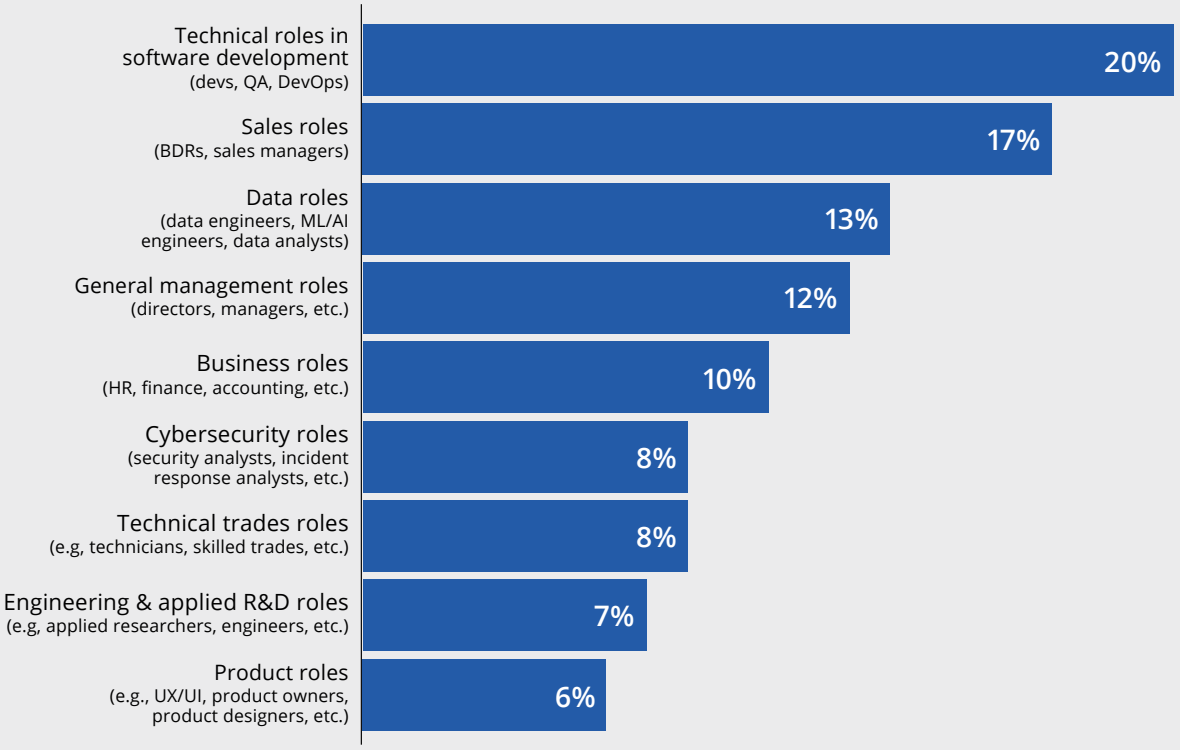


Figure 8: Top In-demand Roles in 2026, Employer Survey, Jan-April 2026.

62 Randstad Canada, "Randstad Canada: Most In-Demand Jobs for 2026", January 5, 2026, https://www.randstad.ca/newsroom/randstad-canada-most-in-demand-jobs-2026/

Digital Nova Scotia's job postings data from 2020-2026 further reinforces that demand is a blend of technical and business occupations, while also providing greater specificity regarding the roles. The concentration of demand within software engineering is particularly notable. Over the last five years, more than 72% of the top 15 in-demand occupations were software development roles, while approximately 60% of those roles specifically indexed on full-stack developers. Backend development roles accounted for approximately 20% of software-related postings, while front-end roles represented just 10% of demand and declined steadily over time. This concentration suggests that employers increasingly prioritize versatile technical talent capable of working across multiple layers of development, deployment, and operational environments.

Beyond engineering roles, job postings data also reveal a growing demand for analytical, delivery, and business occupations. The Business Analyst ranks among the most frequently posted non-technical role, highlighting demand for professionals who can translate business requirements into technical solutions and help organizations operationalize technology. Importantly, despite the uniformity of the job title, the Business Analyst can hold very different functions depending on the industry; for example, a Business Analyst working at a software services firm may focus heavily on product requirements, process maps and workflows, and user stories, whereas a Business Analyst within an ocean technology firm may focus more on research, regulatory analysis, stakeholder engagement or reporting functions.

Data-focused occupations like Data Engineer and Data Analyst also featured well, reflecting growing emphasis on analytics, automation, and data-driven decision-making. Management and coordination-oriented roles, including Project Manager, Product Manager, and Account Manager, appeared less frequently overall but are important components of the ecosystem's profile.

Top Jobs: 2020–2026

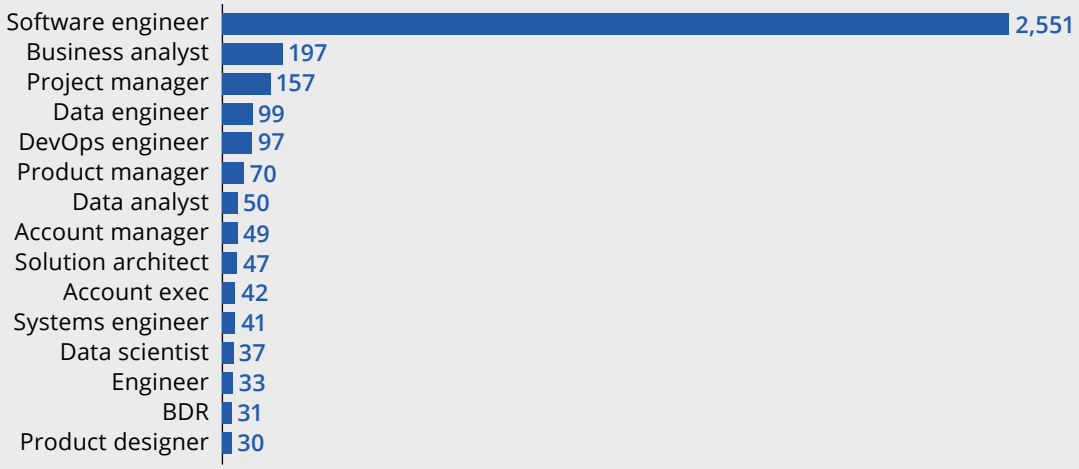


Figure 9: Top jobs 2020-2026; Source: job postings data, Digital Nova Scotia Job Board, 2020-2026

Yet, labour demand represents just one side of the equation; the other is labour availability and time-to-hire. According to the Employer Survey, the hardest-to-fill occupations within Nova Scotia's digital economy were software developers (25%), AI and machine learning developers (nearly 19%), tech leads (12.5%), and sales-related roles (12.5%).

Interview and workshop participants broadly reinforced these findings while adding important nuance. Software development talent was frequently described as difficult to hire, though still relatively "sourceable" within the local labour market. Most employers indicated that qualified software candidates could generally be identified within three months or less.

Technical Skill Needs & the Technology Lifecycle

Labour demand in Nova Scotia's digital economy increasingly reflects the full lifecycle of digital product and service delivery versus isolated, one-off technical functions. While technical development roles are key, employers consistently emphasized the growing importance of commercialization, operationalization, and delivery capabilities that enable firms to scale.

Experienced talent in sales, strategy, and commercialization functions was consistently described as significantly harder to secure than technical talent. Employers frequently reported needing to recruit outside the province for these roles and extending hiring timelines to 6 months or more. Although the total volume of demand for these roles is smaller than that of technical occupations, their strategic importance is high. Functions tied to sales, strategy, and commercialization play a critical role in translating technical capability into business growth by refining value propositions, expanding client relationships, supporting market expansion, and helping firms scale products and services. These roles can be described as the connective tissue that enables firms to move from early-stage validation toward long-term growth.

According to the Employer Survey, the technical skills most important to organizations include programming, cloud infrastructure, AI fundamentals, AI model use, workflow automation, cybersecurity, and systems integration. Within these, several areas stand out: understanding of AI/ML fundamentals (18.2% of AI-related skills), cloud infrastructure deployment and management (34.2% of infrastructure-related skills), installation and maintenance of IoT sensors (20.8% of hardware-related skills), and programming (17.3% of software skills).

Digital Nova Scotia job posting data from 2024 through early 2026 reinforces these findings and reveals a clearer hierarchy of technical demand across the ecosystem. Overall, the labour market increasingly reflects a layered progression of demand: from foundational digital infrastructure to software and application development, through to cloud-native deployment, operationalization, and scale.

- **Foundation** **Cybersecurity, cloud, and systems integration.** Cybersecurity (1,308 mentions), cloud infrastructure (1,267), and systems integration (1,065) are the most frequently cited technical skill needs, reinforcing the extent to which infrastructure, interoperability, and security form the base layer of Nova Scotia's digital economy.

- **Build** **Software development, automation, analytics.** Programming and data skills are also prominent, with SQL (794), automation (758), Python (724), and API development (724) appearing frequently, alongside Java (596) and JavaScript (467). Together, these point to strong demand for production-level development capabilities that will build on that base layer of digital infrastructure.

- **Scale** **Deployment, operationalization, continuous improvement.** Cloud ecosystem skills are also dominant, with platforms like Azure (671), AWS (623), and GCP (273) widely cited, alongside enablers like CI/CD (597), DevOps (578), Docker (376), and Kubernetes (353). Together, these point to a labour market orienting itself toward cloud-native development, deployment, and operations, not bespoke or standalone solutions.

In-Demand Technical Skills

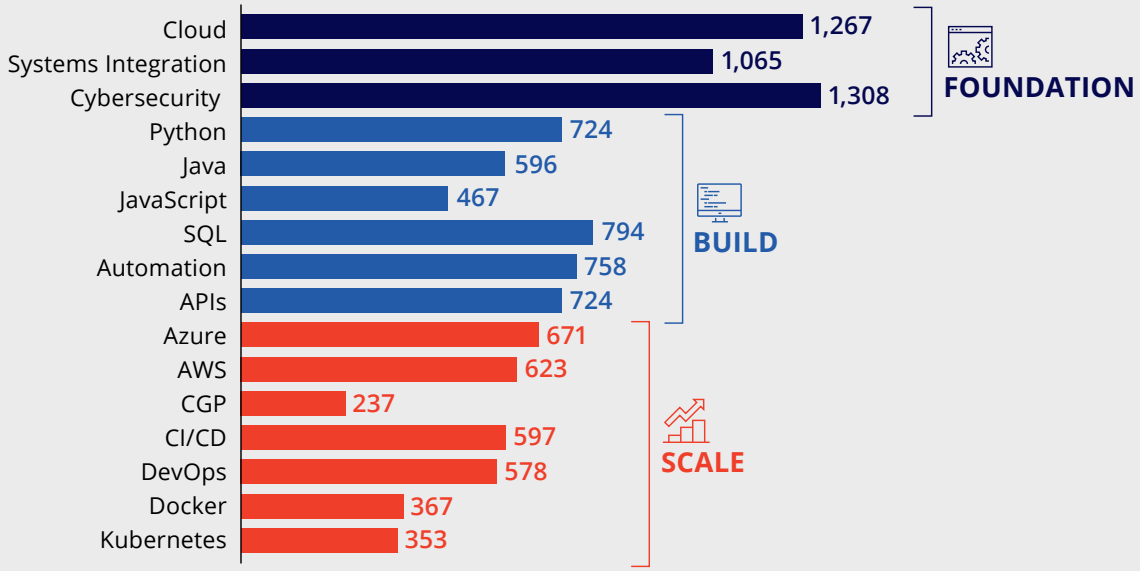


Figure 10: In-demand Technical skills; Source: Job postings data, Digital Nova Scotia Job Board, 2024-2026.

Although AI was consistently identified as a strategic priority area throughout the Employer Survey and interviews, job postings suggest that demand for highly specialized AI skills remains comparatively early-stage: references to AI and machine learning appear less frequently. This finding aligns closely with Nova Scotia's current stage of AI adoption and operational maturity. While organizations are increasingly experimenting with AI tools and building awareness around potential use cases, many firms have not yet fully translated AI adoption into large-scale deployment, commercialization, or dedicated workforce transformation.

While Nova Scotia may be somewhat "behind" provinces with more established AI hubs (e.g., Ontario, BC, Alberta), broader market data suggests that Canadian firms are still largely in an early, experimental phase of adoption. Recent data from Statistics Canada finds that in the second quarter of 2025, just 12% of Canadian businesses reported using AI to produce goods or deliver services over the previous 12 months.[63] Although this represents a 6 percentage point increase from the previous quarter, overall adoption remains relatively low, positioning Canada as generally lagging behind mature global markets in AI literacy and uptake.[64]

Soft Skills, T-Shaped Professionals & the Senior Talent Crunch

Taken together, the job posting data align with survey findings, indicating that technology roles are the primary driver of labour demand. However, the digital economy is not talent-constrained only in technical areas; rather, firms increasingly require integrated, cross-functional teams to effectively build, deliver, and scale digital solutions.

Interviews further highlighted this reality, referring to what can be described as a growing demand for "T-shaped" professionals: individuals with deep expertise in one area and the ability to operate across multiple functions.[65] In practice, this means combining specialized technical knowledge with broader capabilities like communication, collaboration, problem-solving, stakeholder engagement, and adaptability.

The growing importance of T-shaped talent aligns with a broader shift in which work is becoming increasingly integrated and interdisciplinary, rather than siloed into narrowly specialized functions. This need is especially pronounced among smaller and scaling firms. Maintaining a large bench of highly specialized talent can be financially and operationally impractical, particularly when demand for niche expertise fluctuates across projects or growth cycles. As a result, many organizations increasingly prioritize adaptable talent capable of spanning technical, operational, business, and delivery functions, allowing firms to scale more efficiently while managing costs and organizational risk.

The soft skills most needed by employers in Nova Scotia's digital economy are verbal communication (62.5% of firms requiring expert-level proficiency), teamwork and collaboration (75%), critical thinking (62.5%), problem-solving (62.5%), and self-motivation (75%). These findings point to a strong emphasis on individuals who can operate effectively in team-based, fast-moving environments while navigating complex and evolving challenges.

63 Valerie Bryan, Shivani Sood, Chris Johnston, Analysis on Artificial Intelligence Use by Businesses in Canada, Second Quarter of 2025, (Ottawa: Statistics Canada, June 16, 2025), https://www150.statcan.gc.ca/n1/pub/11-621-m/11-621-m2025008-eng.htm

64 KPMG, Canada is Lagging Behind Global Peers in AI Trust and Literacy, June 23, 2025, https://kpmg.com/ca/en/insights/2025/06/canada-lagging-global-peers-in-ai-trust-and-literacy.html

65 Markus Hammer, Maya Harris, Kiran Ramnane, Erin Blackwell, "Ops 4.0 – the Human Factor: A Class Size of 1", McKinsey & Company, July 19, 2021, https://www.mckinsey.com/capabilities/operations/our-insights/operations-blog/ops-40-the-human-factor-a-class-size-of-1

Digital Nova Scotia job posting data reinforce this emphasis on so-called “soft” skills, or, more accurately, human skills. Communication (789 mentions) is the most frequently cited, followed by attention to detail (591) and problem solving (513). Additional competencies, like initiative (305), teamwork (236), and analytical thinking (230), further highlight the importance of adaptability, ownership, and the ability to work across functions. Together, these patterns suggest that, in addition to technical expertise, employers are looking for people who can translate requirements into easily digestible insights, collaborate effectively, and execute professionally; once again, the importance of the “T-Shaped professional” is reinforced.

Interestingly, leadership (28) and customer service (11) appear less frequently in postings, despite feedback from workshop participants and interviewees that mid to senior-level roles are most in demand and hard to find. This finding may reflect the fact that these skills are either role-specific (e.g., more relevant in certain client-facing positions) or are increasingly treated as baseline expectations, especially for mid and senior-level roles. Recent research by ICTC finds that employers are generally less willing to train workers in soft skills than in technical skills.[66] Often, employers expect candidates to arrive with these capabilities already well developed.

In-Demand Human Skills

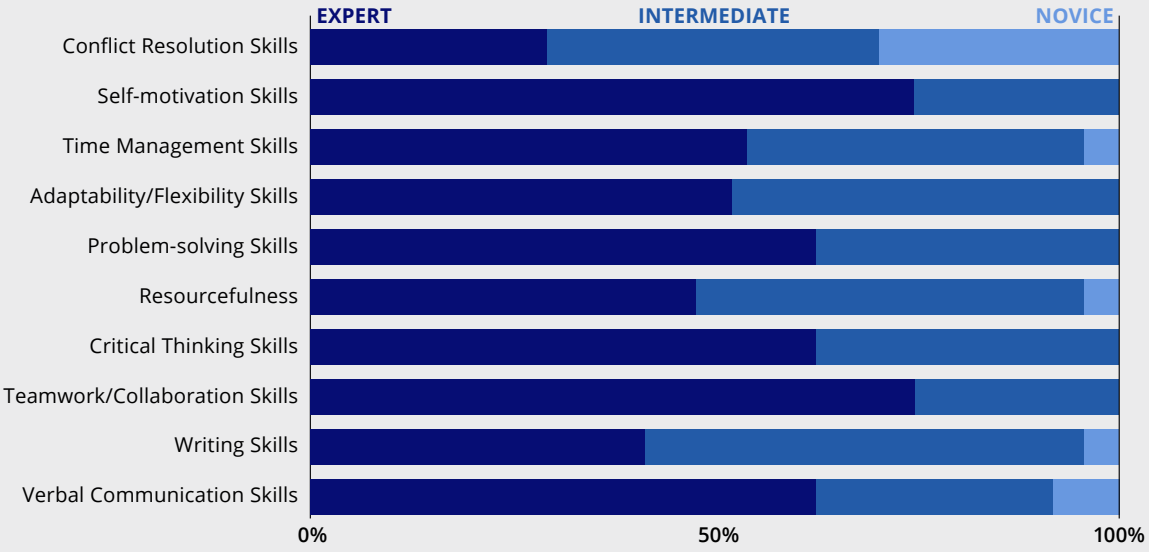


Figure 11: Soft Skills in-demand, Employer Survey, Jan-April 2026.

66 Alexandra Cutean, The Digital Talent Imperative: Calgary’s Economic Edge (Calgary: Calgary Economic Development, ICTC, July 21, 2023), https://www.calgaryeconomicdevelopment.com/assets/Reports/EDGE-UP-2.0-REPORT_FINAL-7.21.23.pdf

How easy is it to hire talent with...

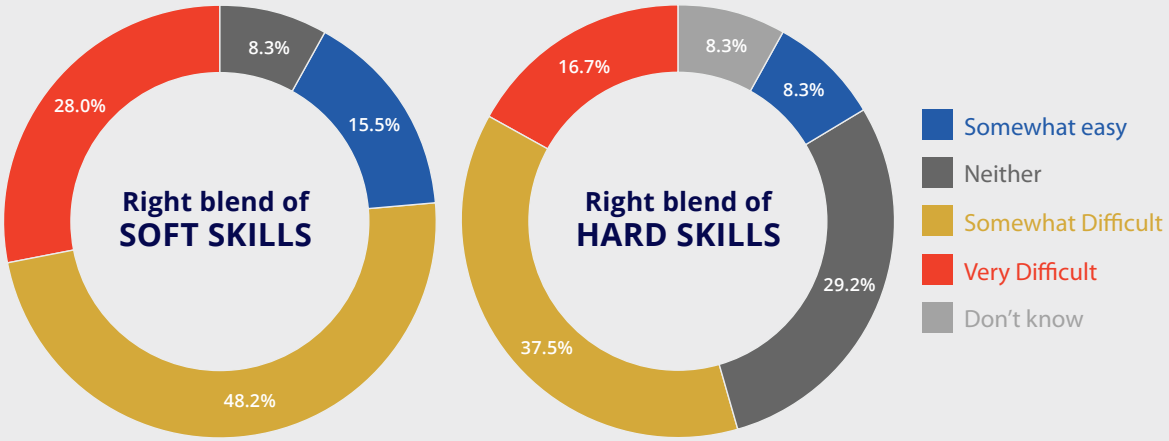


Figure 12: Sourceability by skill, Employer Survey, Jan-April 2026.

At the same time, interviews, workshops, and survey responses consistently pointed toward a broader structural challenge within Nova Scotia's labour market: the growing shortage of experienced mid-career and senior-level professionals. Across all primary research inputs, employers emphasized that while entry-level talent pipelines are healthy (sometimes perceived as oversaturated), experienced professionals with 5+ years of practical industry experience are significantly difficult to source.

Put otherwise, the challenge is not overall labour quantity, but rather labour composition and experience depth. To exemplify this point, employers frequently reported receiving large volumes of applications from junior candidates with strong educational credentials but lacking the practical experience required to lead projects, mentor teams, navigate operational complexity, or contribute meaningfully in fast-moving environments. This dynamic creates a dual labour market bottleneck: on one hand, firms face growing pools of entry-level workers seeking opportunities; on the other, organizations continue to struggle to attract and retain the experienced talent necessary to scale operations, manage clients, commercialize products, and support organizational growth.

The implications of this "senior experience gap" are significant. While not unique to Nova Scotia, insufficient experience stifles the ecosystem's ability to progress to ideal stages of maturity and impact. A recent study by ICTC found that, especially with the rise of automation and AI, the talent pipeline for junior-level workers is becoming more constrained, while demand for mid- and senior-level workers with real on-the-job experience is growing. The study notes that companies are increasingly seeking experienced professionals who can manage a range of complex responsibilities and drive business growth, rather than entry-level workers.[67] As a result, despite a general plan to increase headcount, just 5% of Canadian employers believe that existing talent, namely at the entry level, has the relevant skills to succeed.

67 Mairead Matthews, Faun Rice, Automation and the Future of Tech Careers in Canada: What Students Need to Know (Ottawa: ICTC, 2025), https://ictc-ctic.ca/reports/automation-and-the-future-of-tech-careers-in-canada

This finding is further reinforced by the Employer Survey results, which show that firms consistently report difficulty finding talent with the right blend of skills. Moreover, while gaps exist on the technical side, the challenge appears more acute in soft skills: over 70% of employers indicated that it is somewhat to very difficult to find candidates with the appropriate mix of communication, problem-solving, and collaboration capabilities.

Combined, the importance of experience in the labour market, versus “skills on paper” is clear. While technical skills can often be developed through formal education and training, soft skills are typically built through real-world exposure: working in teams, navigating ambiguity, working with different personalities, managing conflict, and solving practical business problems. More experienced candidates tend to bring not just deeper technical knowledge, but the contextual judgment and interpersonal capabilities needed to apply that knowledge effectively and steer business growth. Again, across the digital ecosystem, Nova Scotia’s talent challenge is more about quality than quantity, and the biggest gap is experience.

SECTION III

WORKFORCE PROFILES & SUPPLY DYNAMICS

This section examines labour market dynamics from the supply side of Nova Scotia's digital economy, focusing on workforce composition, experience, mobility, and perceptions of job quality and future opportunity. The analysis is grounded in data from an Employee Survey of individuals working in digital and technology-related roles across sectors (n = 557); it is complemented by comparative points from the Employer Survey where relevant. As in Section 2, it is further supported by evidence and data from the broader literature.

Together, these findings provide a more complete understanding of the province's digital labour market "system," linking workforce supply with employer demand and identifying where alignment, friction, and structural gaps exist. Importantly, the findings suggest that Nova Scotia's primary labour market challenge is increasingly tied less to the absolute supply of workers and more to ecosystem depth, experience composition, retention, and long-term scaling capacity.

Workforce Composition

Respondents to the Employee Survey were largely concentrated in core digital occupations. More than three-quarters were employed in technical roles, while the remainder worked in non-technical positions within technology-intensive organizations.

Software engineering and development roles dominated the workforce profile, but among respondents identifying as engineers or developers, front-end developers were the most frequently cited, followed by back-end developers. Despite this strong technical base, it highlights an important mismatch with market demand.

Full-stack developers—identified by employers as one of the most in-demand occupations in Nova Scotia's digital economy—were relatively absent from the workforce profile. At the more benign end, this may simply reflect inconsistent naming conventions, with some respondents using "software engineer" as a broad catch-all term, while actually having full-stack responsibilities. On the other end, it may point to an important structural issue: a significant shortage of versatile end-to-end development talent that is critical for both the mid ("build") and top ("scale") layer of the technology lifecycle.

This distinction is important because full-stack developers represent one of the most valuable and adaptable roles within modern software environments, even in "AI first" firms.[68] By contrast, front-end-oriented roles appear to be significantly overrepresented relative to labour demand (i.e., less than one quarter of all software development roles deemed in-demand by employers were front-end). Beyond immediate demand, this imbalance is even more important given broader shifts taking place across software development itself. Increasingly, portions of front-end development are being automated or augmented through AI-enabled tools and platforms,[69] reducing the overall volume of demand for these workers. In fact, data on recent tech sector layoffs shows that front-end developers have been disproportionately impacted.[70]

68 "The Rise of AI-integrated full-stack Development", nSchool Academy, https://www.n-school.com/the-rise-of-ai-integrated-full-stack-development/

69 Romain Valle, et al. "The Use of Artificial Intelligence in New Product Development", Technovation, May 2026, Article 103541 Volume 153, https://www.sciencedirect.com/science/article/pii/S0166497226000763

70 Bhavik Patel, "Analyzing Tech Layoffs: Which Roles Were Hit Hardest?", Product Coalition – Medium, September 17, 2024, https://medium.productcoalition.com/analysing-tech-layoffs-c67d7de2d630

Anecdotal evidence from interviews and workshops suggests that this shift, along with the expanded capabilities of AI-powered development tools, is starting to influence hiring in the province as well. In some cases, employers noted that in addition to potential layoffs, front-end workers may face more limited long-term growth pathways if they are unable to broaden their technical capabilities.

Additional supply gaps are also evident around scaling and operational functions. While employers consistently identified strong demand for DevOps, delivery coordination, and sales-oriented roles, these occupations appear comparatively underrepresented within the workforce profile. The relative absence of sales and commercialization functions is particularly notable because these roles play a critical role in translating technical capability into business growth, client acquisition, partnerships, and market expansion. Past research from Digital Nova Scotia also reinforces this trend; its 2022 Workforce Insights Survey found that non-technical skills, including marketing and project management, ranked among the top five in-demand skills sought by employers.[71]

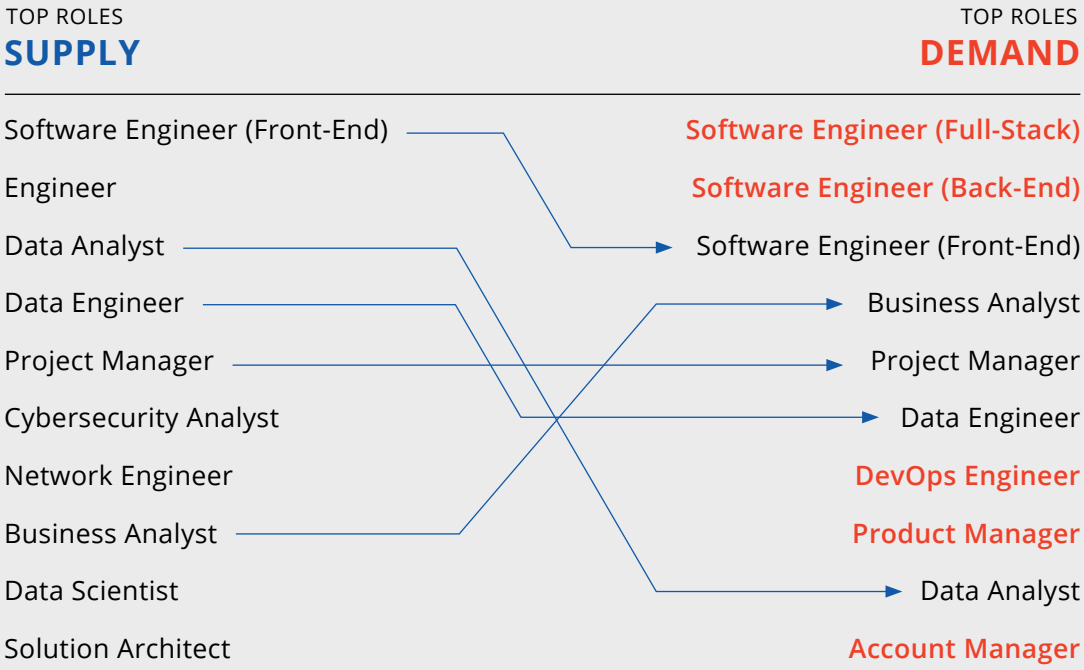


Table 4: Top Roles: Demand versus Supply; Employer Survey, January-April 2026; Employee Survey, March-April 2026.

71 Digital Nova Scotia, "Key Skills Tech Employers Need from Digitally Skilled Workers", May 20, 2022, https://digitalnovascotia.com/news/key-skills-tech-employers-need-from-digitally-skilled-workers/#:~:text=Identifying%20the%20Digital%20Skills%20Employers%20Desire:%20Marketing,design%20(49%25)%20*%20Digital%20project%20management%20(46%25)

Education and Entry Pathways

Educational attainment among respondents in the Employee Survey was high. More than three-quarters (77%) reported holding at least a bachelor's degree, a figure that is significantly higher than the Canadian average. In 2025, approximately 64% of Canadians reported holding a college or university credential.[72] Importantly, while post-secondary attainment across Canada is driven more heavily by college and trades credentials, respondents in Nova Scotia's digital economy skewed more strongly toward university education.

Compared against Nova Scotia's broader labour force, the contrast is even more pronounced. In 2025, only approximately 30% of the province's population held a tertiary education credential, a figure that has declined modestly since 2020.[73] Collectively, these findings reinforce that Nova Scotia's digital workforce represents a highly educated segment of the economy.

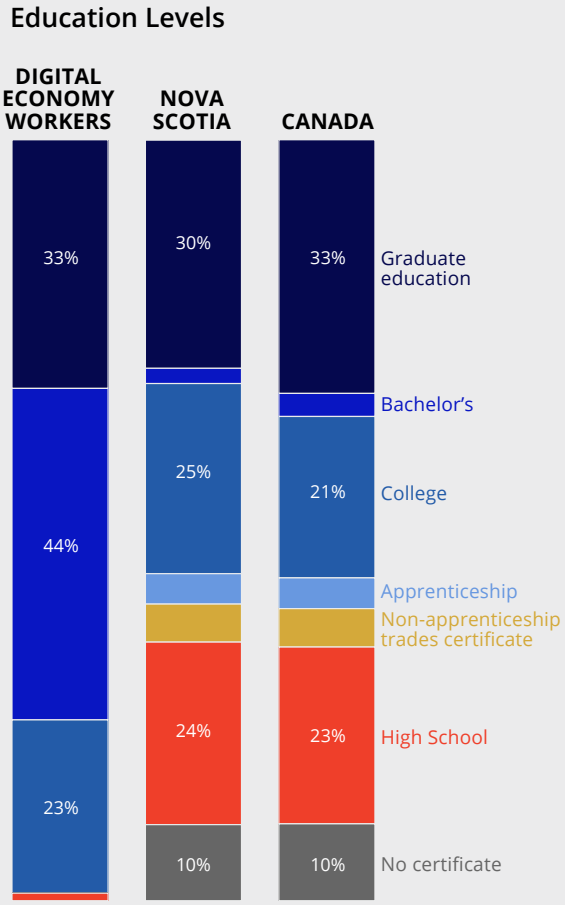


Figure 13: Education levels, Digital economy workers versus Nova Scotia (general economy) and Canada (general economy); Employee Survey, March-April 2026; Statistics Canada 2021 Census.

Although only 20% of respondents held professional certifications in addition to their formal education, the credentials they reported are largely aligned with market demand. The Project Management Professional (PMP) designation was the most common, followed by cloud-related certifications such as Microsoft Azure and AWS. According to research from Revelio Labs, analysis of millions of Canadian job postings from 2017-2024 finds a strong demand for both AWS and Azure certifications, with a growing edge for Microsoft-certified candidates.[74] From 2017-2024, job postings for cloud technicians requiring Azure skills rose from 21% to 34%, reflecting broader shifts toward cloud-native infrastructure and enterprise environments.

72 Statistics Canada, "Study: Job Tenure, 2024", The Daily, March 25, 2026, https://www150.statcan.gc.ca/n1/daily-quotidien/260325/dq260325c-eng.htm
73 Statistics Canada. Table 37-10-0130-01 Educational attainment of the population aged 25 to 64, by age group and gender, Canada, provinces and territories
74 Revelio Labs, "Cloudy Forecast for AWS", September 10, 20254, https://www.reveliolabs.com/news/business/cloudy-forecast-for-aws/

Entry pathways into Nova Scotia's digital economy were also notably diverse. Post-secondary education was the most common entry route (28%), followed by internship or co-op experience (22%) and career transition from another field (20%). Bootcamps or short-duration training accounted for 13% of responses, and self-taught pathways another 12%.

This distribution reinforces two important things: first, digital talent pathways are increasingly non-linear; second, the relatively high share of career transitioners and non-traditional routes suggests that initial access to the digital economy is more permeable than other sectors. Policies and programs that support mid-career reskilling may be key to ensuring a strong supply of talent and to better leverage existing experience to steer growth.

Entry Paths to the Digital Economy

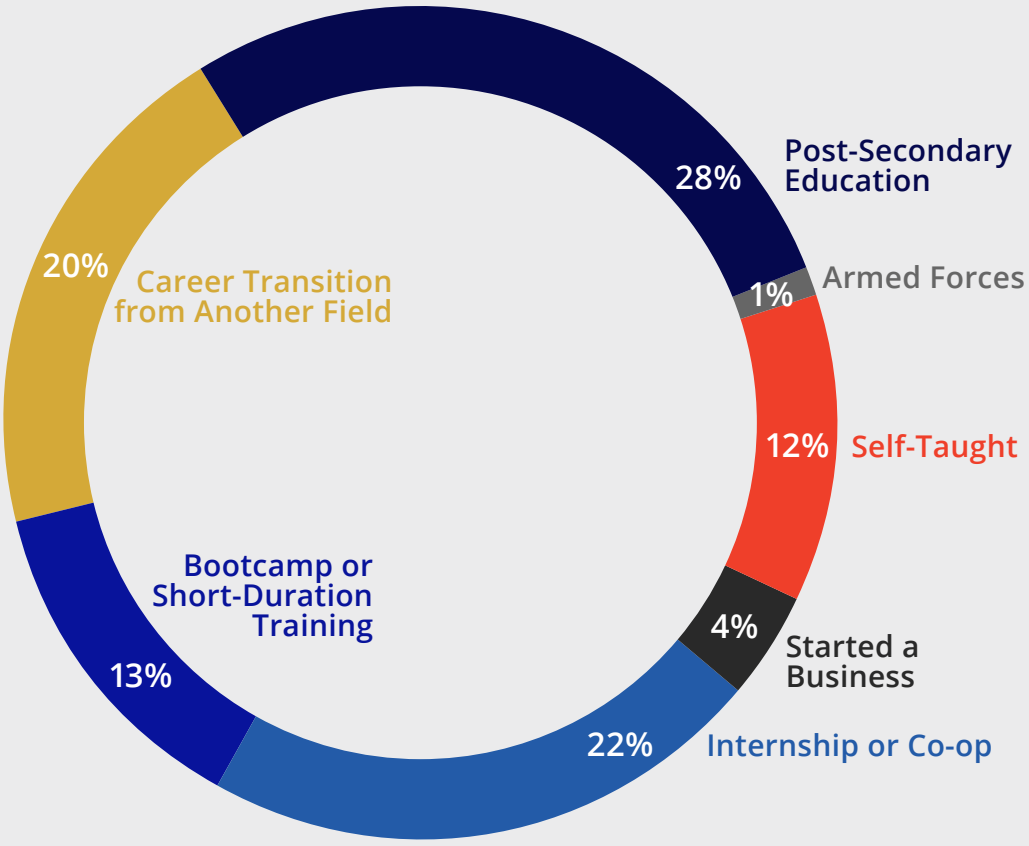


Figure 14: Entry pathways to the digital economy, Employee Survey, March-April 2026.

Another notable opportunity may rest with leveraging Canadian Armed Forces veterans and transitioning military personnel. Recent ICTC research conducted in partnership with COVE identified substantial skill overlap between CAF veterans and high-demand occupations within Nova Scotia's ocean technology ecosystem, particularly in areas like cybersecurity, systems operations, communications, engineering support, and technical infrastructure.

Veterans are often a highly trained and experienced talent pool with capabilities that align strongly with several of Nova Scotia's priority growth industries. However, barriers like civilian credential recognition[75] and transition support continue to limit integration into the workforce. Strengthening pathways that translate military experience into civilian employment is key.

The Career Transitioner Opportunity

Experience levels suggest a workforce that is still relatively early in its digital tenure, but not necessarily early in overall experience. While approximately 70% of respondents reported between one and seven years of experience working in the digital economy, their broader professional experience profile is substantially deeper. Nearly 71% reported between four and fifteen years of total work experience across all fields, while an additional 20% reported sixteen or more years of overall professional experience.

Total Experience: Digital Economy and Beyond

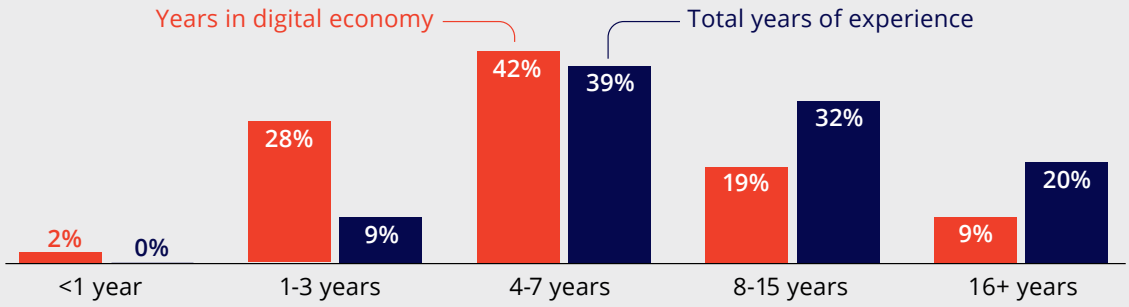


Figure 15: Total professional experience, in and out of the digital economy; Employee Survey, March-April 2026.

This "gap" between total professional experience and years in the digital economy suggests that a significant share of the workforce may be career transitioners, or individuals who have built experience in other sectors before moving into the digital economy. In other words, in addition to a strong supply of junior talent, there may be a relatively robust supply of mid-career professionals actively upskilling for roles in the digital economy.

75 "National Veterans Employment Strategy", Government of Canada, https://veterans.gc.ca/en/about-vac/our-values/national-veterans-employment-strategy/national-veterans-employment-strategy

Recent research finds transferable skills between in-demand tech roles across various occupations: for example, a 2023 study by ICTC identified 46% overlap between accounting professionals and data scientists, and 30% overlap between logistics professionals and QA Testers.[76] These findings suggest that digital occupations rely not only on technical knowledge, but also on broader analytical, operational, communication, and problem-solving capabilities that may already exist elsewhere within the labour market.

For employers, this points to an important and often underutilized talent opportunity. In areas where hiring challenges are most acute—like senior roles in strategy, business development, and sales—an openness to candidates without direct domain experience in the digital economy may help alleviate bottlenecks. While these individuals may lack sector-specific knowledge, they often bring highly transferable capabilities in areas like client engagement, problem-solving, commercial strategy, and operations. In fact, a recent study by ICTC, focusing on the Calgary digital ecosystem, found that over 85% of employers are open to hiring career transitioners, reflecting a view that these individuals bring resilience, resourcefulness, and adaptability.[77] The same study found that more than 95% of employers who had previously hired a career transitioner would do so again.

Better leveraging this supply stream is not just about filling vacancies; these workers can mentor junior staff, strengthen firms' leadership capacity, and help them scale more effectively over time. As Nova Scotia's digital economy continues to mature, the ability to better leverage career transitioners may represent an important strategic advantage.

Wages, Competition and Labour Mobility

Digital economy wages in Nova Scotia are comparatively strong relative to the broader provincial economy, though compensation satisfaction is more mixed.

Reported salary levels are concentrated in the middle of the income distribution. A combined 77% of respondents reported earning between $50,000 and $99,999 annually, with 43% in the $50,000 to $74,999 range and 34% in the $75,000 to $99,999 range.14.5% reported earning $100,000 or more, while only 5% reported salaries below $50,000 (3% preferred not to disclose).

76 Alexandra Cutean, The Digital Talent Imperative: Calgary's Economic Edge (Calgary: Calgary Economic Development, ICTC, July 21, 2023), https://www.calgaryeconomicdevelopment.com/assets/Reports/EDGE-UP-2.0-REPORT_FINAL-7.21.23.pdf

77 Ibid

78 Nova Scotia Department of Finance and Treasury Board, "Labour Market Statistics, February 2026", March 2026, https://novascotia.ca/finance/statistics/archive_news.asp?id=21837&dg=&df=&dto=0&dti=3

When benchmarked against provincial and national averages, these figures reinforce that digital roles in Nova Scotia come with a wage premium. As of February 2026, the average annual wage in Nova Scotia was $63,960; the highest compensation was in public administration, at $92,864, and the lowest was in accommodation and food services, at $30,212.[78] Although most digital workers are not concentrated at the very top of the income distribution, the sector still provides consistently higher-than-average earnings relative to the broader provincial economy.

At the same time, compensation satisfaction is notably more nuanced. Although 68% of respondents rated their compensation above the midpoint, only one in five described themselves as highly satisfied with their earnings; nearly one-third were dissatisfied.

This tension likely reflects broader affordability and competitiveness pressures that have intensified across Nova Scotia in recent years. The province historically benefited from lower housing costs and a lower overall cost of living relative to larger Canadian technology hubs. In recent years, however, rapid increases in housing costs and inflation pressures have significantly eroded this advantage.

That said, interviews and workshop discussions suggest that compensation levels have also increased over the years. According to employers, Nova Scotia's digital economy is increasingly competitive with other provinces, particularly for experienced technical talent. This distinction is important because digital labour markets increasingly operate nationally and globally, not just locally.

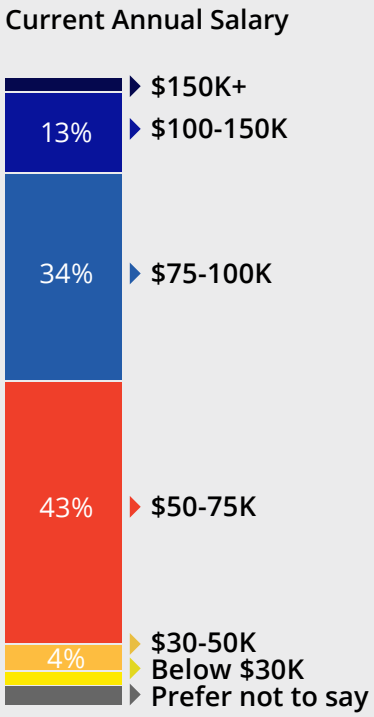


Figure 16: Current annual salary; Employee Survey, March-April 2026.

More and more, workers compare opportunities across Canada and even internationally, particularly within remote work environments. As a result, labour competitiveness increasingly depends not just on wages, but also on broader purchasing power, affordability, flexibility, career progression, and long-term opportunity.

78 Nova Scotia Department of Finance and Treasury Board, "Labour Market Statistics, February 2026", March 2026, https://novascotia.ca/finance/statistics/archive_news.asp?id=21837&dg=&df=&dto=0&dti=3

Satisfaction: Job Versus Wages

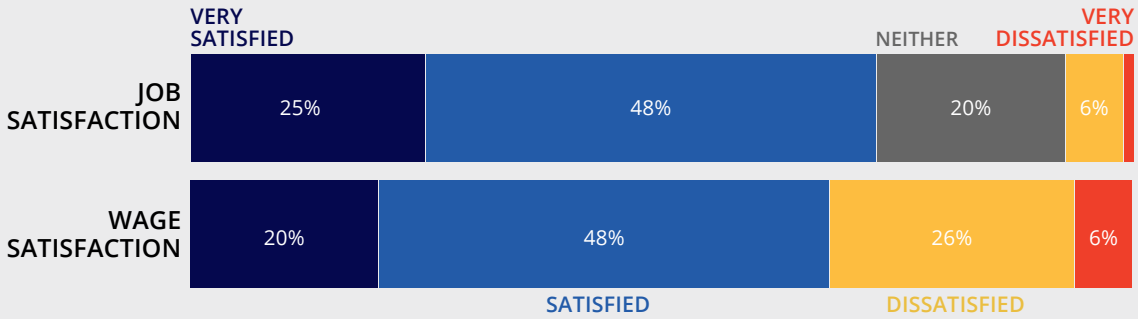


Figure 17: Job versus wage satisfaction; Employee Survey, March-April 2026.

Perceptions of job security across Nova Scotia's digital economy are generally positive, with nearly three-quarters of respondents reporting feeling somewhat secure or very secure in their current role, compared with 18% who were neutral and 10% who felt somewhat or very insecure. This largely mirrors responses from the Employer Survey, which surfaced consistent employment growth over the last three years, and continued plans to hire or freeze—but not reduce—headcount.

How Secure do You Feel in Your Job?

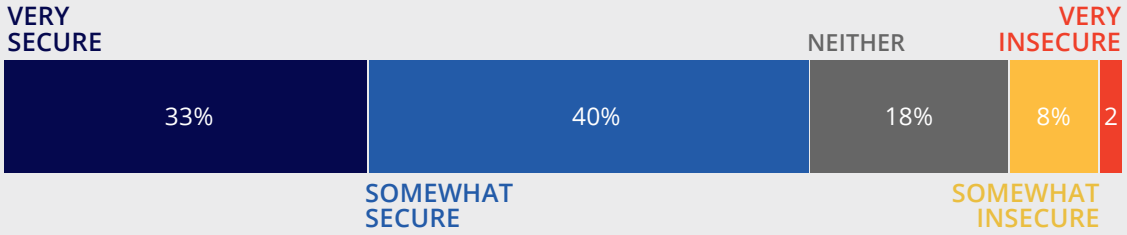


Figure 18: Job security perceptions, Employee Survey, March-April 2026.

Importantly, job security does not necessarily translate into long-term retention. Despite relatively positive perceptions of stability, many workers remain open to pursuing alternative opportunities: 34% of respondents said they were likely or very likely to pursue another opportunity in the next 12 months. This suggests that retention within Nova Scotia's digital economy is not driven primarily by stability; broader questions of competitiveness, career growth, compensation, flexibility, and quality of work play important roles. This was even the case among workers who relayed strong confidence in the viability of the digital economy itself.

78 Nova Scotia Department of Finance and Treasury Board, "Labour Market Statistics, February 2026", March 2026, https://novascotia.ca/finance/statistics/archive_news.asp?id=21837&dg=&df=&dto=0&dti=3

Likelihood of Seeking a New Role This Year

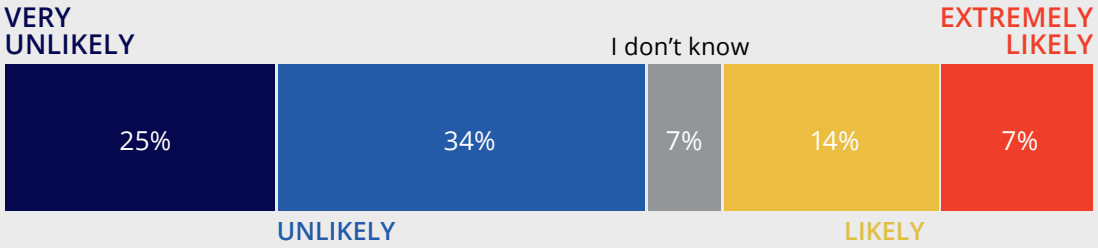


Figure 19: Likelihood of seeking new work in the next 12 months; Employee Survey, March-April 2026.

Despite the ecosystem's inherently digital nature, work in Nova Scotia's digital economy is largely split between on-site and hybrid models. Nearly half of respondents (48.3%) reported working fully on-site, while 42.3% reported hybrid arrangements and only 9.4% reported being fully remote.

This distribution suggests that digital work in Nova Scotia remains meaningfully anchored in local workplaces and organizations. Although this distribution broadly aligns with wider Canadian labour market trends, where fully remote work has declined from pandemic-era highs and stabilized at lower levels[79], it also raises important strategic questions for Nova Scotia's digital economy.

Research increasingly shows that remote and hybrid work arrangements can enhance productivity.[80] It also expands labour force participation, improves access to talent, supports inclusion of workers from smaller communities, and enhances labour market flexibility. In a province where economic activity and population remain heavily concentrated in a limited number of urban centres, distributed work models may also help broaden labour supply and improve rural participation.

That said, increased remote work opportunities can also fuel increased competition for talent. Highly skilled digital workers in Nova Scotia can increasingly access opportunities with employers located elsewhere without relocating physically, while firms in Nova Scotia compete against larger labour markets—something that has also been proven to put upward pressure on wages.

Work Arrangement

Figure 20: Work arrangement, Employee Survey, March-April 2026.

79 Robert Half, Canadian Remote Work Statistics and Trends, accessed April 17, 2026, https://www.roberthalf.com/ca/en/insights/research/canadian-remote-work-statistics-and-trends

80 US Bureau of Labor Statistics, "The Rise in Remote Work Since the Pandemic and Its Impact on Productivity", Beyond the Numbers, October 31, 2024, https://www.bls.gov/opub/btn/volume-13/remote-work-productivity.htm

Equity, Inclusion, and Workforce Participation

Gender representation among Employee Survey respondents is uneven but aligns with broader trends across the digital ecosystem. Men account for 66.1% of the sample, compared with 32.4% women, while only a very small share identified as non-binary (0.5%) or preferred not to say (1.0%). The digital workforce remains clearly male-dominated, indicating that gender imbalance is a structural feature of the talent base.

This pattern is consistent with broader labour market data. Recent research from ICTC found that while women represented approximately 50% of Nova Scotia's overall workforce in 2022, they accounted for just 27% of the ICT sector, and only 17% of technical ICT roles.[81]

Gender Identity

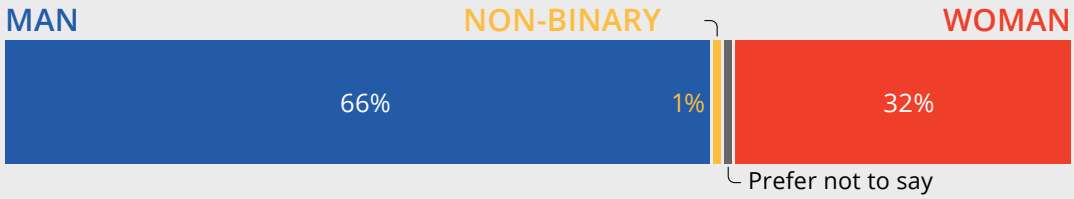


Figure 21: Gender identity, Employee Survey, March-April 2026.

81 Maryna Ivus, Maya Watson, Gender Equity in Canada's Tech Ecosystem: Attracting, Retaining, and Supporting Entry-and Mid-Level Talent", (Ottawa: ICTC, May 2022), https://ictc-ctic.ca/reports/gender-equity-in-canadas-tech-ecosystem

Additional insight into workforce diversity is provided by a broader identity question, structured as a multiple-select option. Within these selections, the largest counts were Indigenous (130), newcomer to Canada (64), member of a racialized group (32), person with a disability (18), and LGBTQIA+ (14), alongside 80 "prefer not to say" responses. The relatively high number of Indigenous respondents likely reflects targeted outreach through Digital Nova Scotia; this is a significant overrepresentation relative to the province's demographic profile, where Indigenous workers are consistently underrepresented in the labour force, including in digital occupations.

How do you identify?

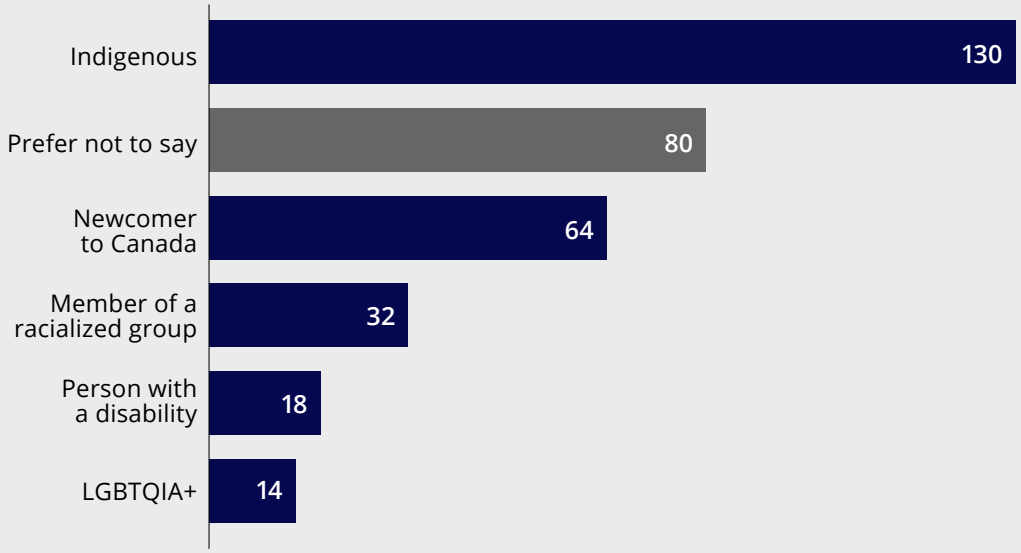


Figure 22: Demographic representation, Employee Survey, March-April 2026.

While a direct benchmark question on perceived representation gaps was not included, the available evidence still points to uneven participation and visibility across groups. The clearest signal remains the gender imbalance, with men outnumbering women by roughly two to one. At the same time, broader research suggests that diversity challenges extend beyond gender. For example, earlier findings from ACOA indicate very low levels of immigrant representation in the region's ICT workforce (less than 1%), compared to 57% in Ontario and a national average of 37%.[82]

Combined, these findings suggest that Nova Scotia's digital talent pool remains relatively narrow in its demographic composition. This has implications not only for equity and inclusion but also for talent supply: in a context of ongoing labour constraints, limited participation from women, newcomers, and other underrepresented groups represents a significant untapped opportunity to expand the workforce and strengthen the sector's long-term capacity.

82 Atlantic Canada Opportunities Agency, The Labour Market in Atlantic Canada, Government of Canada, accessed April 17, 2026, https://www.canada.ca/en/atlantic-canada-opportunities/services/researchstudies10.html

Given the relatively narrow demographic composition of Nova Scotia's digital economy, it is not surprising that one-third of respondents (32%) reported personally experiencing barriers or discrimination in their careers due to their identity. While not a majority, the magnitude of this repose is significant, potentially suggesting that identity-based barriers are not isolated incidents but structural. In the Employer Survey, nearly 20% of respondents relayed a feeling that diversity, equity, and inclusion became somewhat or significantly worse in the digital economy over the last few years, with most citing reasons including bias in hiring decisions, immigration or settlement barriers for newcomers, and bias in promotion or career advancement.

Experienced Identity Barriers in Career

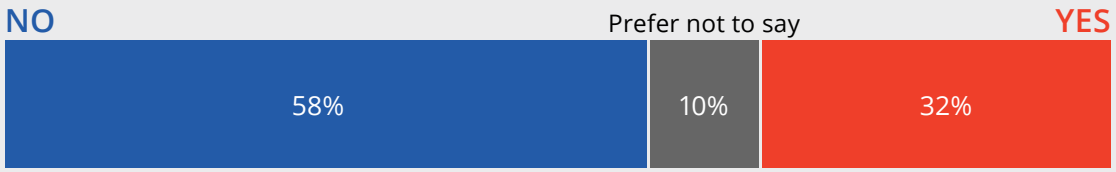


Figure 23: Experience with barriers, Employee Survey, March-April 2026.

At a high level, gender differences appear relatively modest. 31% of men and women reported experiencing barriers or discrimination. While small-base categories—such as non-binary respondents and those who prefer not to say—show higher reported rates, sample sizes are too small to draw firm conclusions.

Gender Versus Barriers Experienced

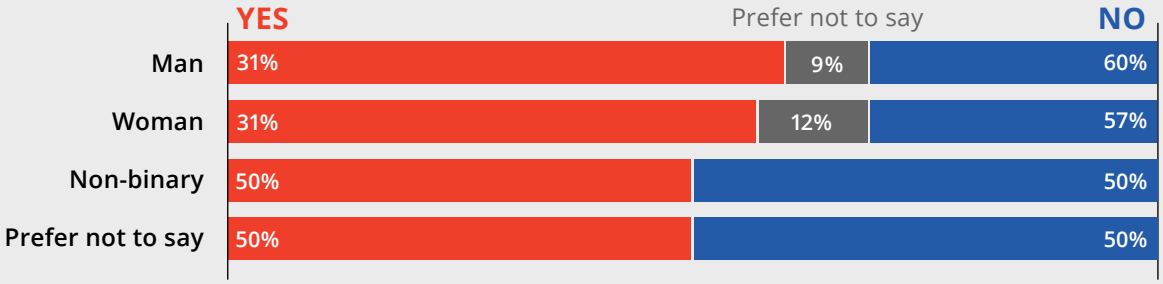


Figure 23: Experience with barriers: gender identity, Employee Survey, March-April 2026.

More variation emerges across other identity groups, though results should be interpreted with caution, given the multi-select nature of the question. Reported rates of barriers or discrimination were highest among respondents identifying as Indigenous (43%), followed by persons with a disability (39%) and members of racialized groups (38%). The corresponding rate for newcomers to Canada was lower (20%), while LGBTQIA+ respondents reported a rate of 29%.

Identity Versus Barriers Experienced

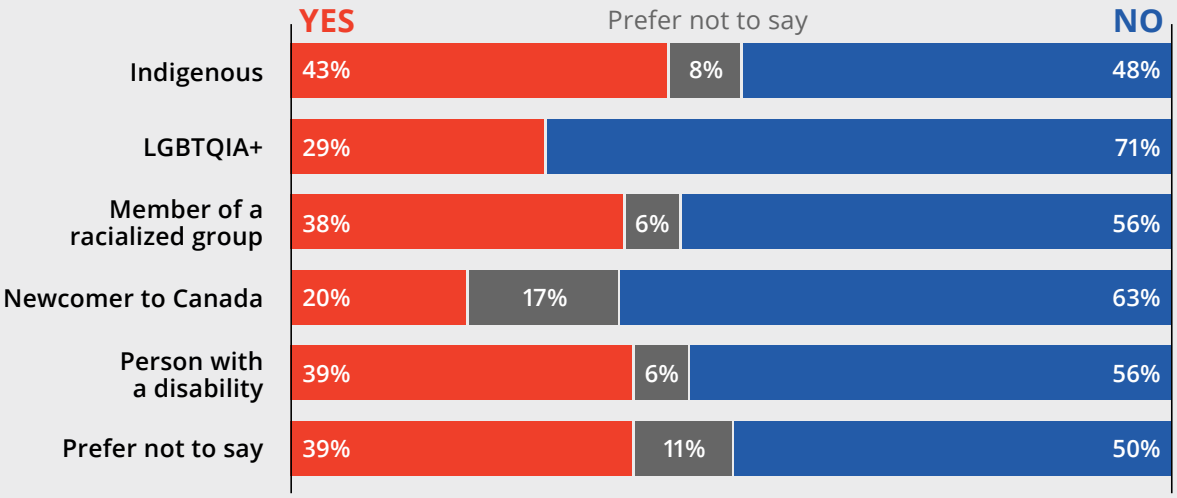


Figure 25: Experience with barriers: other identity, Employee Survey, March-April 2026.

While experiences of discrimination are distributed across the workforce, they are not evenly felt. Certain groups—particularly Indigenous respondents, persons with disabilities, and racialized individuals—report higher rates, pointing to more concentrated inclusion challenges, and opportunities for targeted initiatives that drive meaningful change.

These dynamics carry implications beyond equity outcomes alone. Diverse and inclusive ecosystems are increasingly associated with stronger innovation performance, broader talent pools, and greater long-term resilience. In Nova Scotia's case, improving participation and inclusion across underrepresented groups may be an increasingly important economic imperative.

Retention, Mobility, and Perceptions of Opportunity

Workers appear to hold a generally positive outlook of Nova Scotia's digital economy overall, while still expressing less certainty regarding their own long-term trajectory within it. Nearly 79% of respondents reported being somewhat or extremely confident in the future of the province's digital economy. This confidence appears more cautious than emphatic, suggesting optimism around continued sector growth, but less certainty regarding the pace, scale, and quality of opportunity that the ecosystem will ultimately provide.

In many respects, this pattern mirrors broader findings throughout the Employee Survey: workers generally report strong job security, positive employment conditions, and confidence in the future trajectory of the sector itself. At the same time, many also report intentions to change jobs, uncertainty around long-term career progression, and openness to leaving the province altogether. Collectively, these findings suggest that confidence in the digital economy's future does not necessarily translate into confidence in individual career trajectories within Nova Scotia. This tension becomes clearer when examining career progression expectations.

While approximately 44% of respondents expected to advance into a more senior role within their current organization over the next three to five years, a combined 40% anticipated either moving to a new employer within the same field or transitioning into a different role or occupation entirely. Only a small minority expected to remain in the same role long term.

How do you see your career progressing over the next 3–5 years?

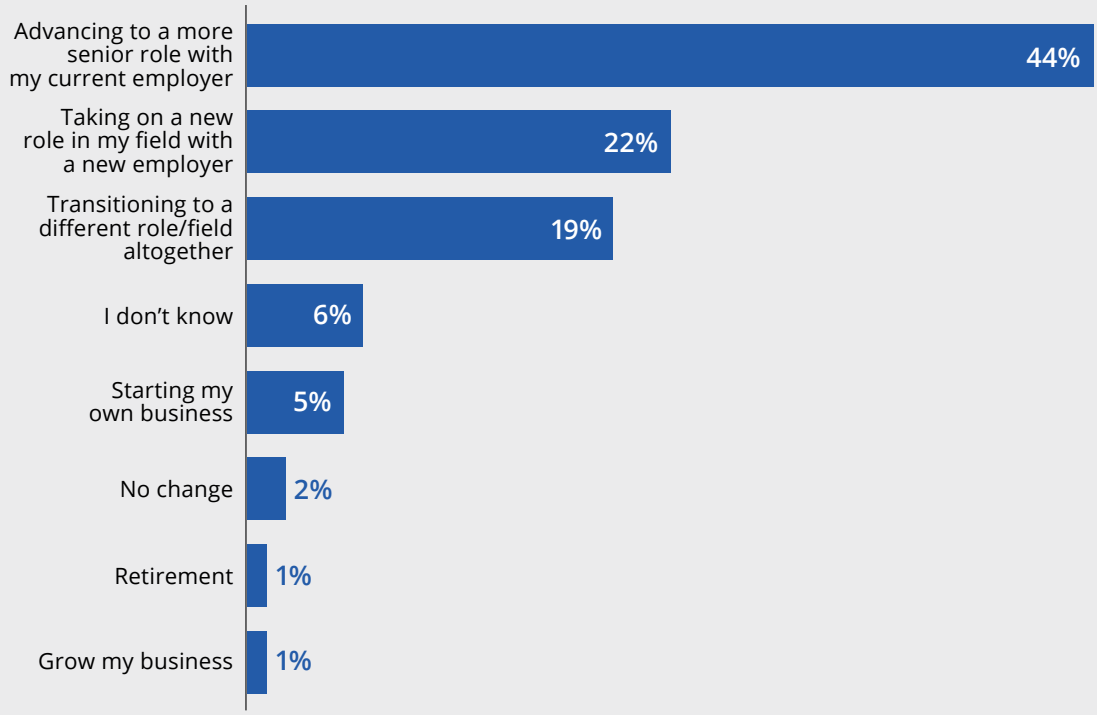


Figure 26: Career progression plans, Employee Survey, March-April 2026.

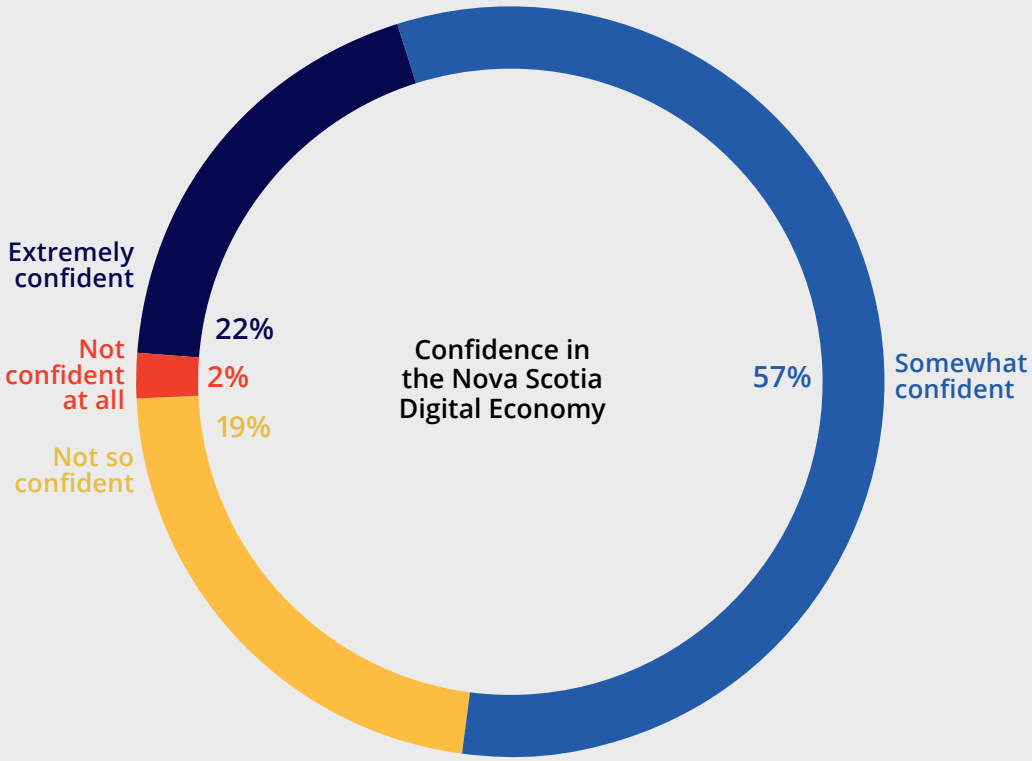


Figure 27: Confidence in Nova Scotia's digital economy: other identity, Employee Survey, March-April 2026.

This pattern is consistent with other Employee Survey findings: workers report relatively strong job security and generally positive employment conditions, which likely contribute to baseline confidence in the sector.

At the same time, approximately one-third of respondents were either planning to leave Nova Scotia over the next several years or are unsure. This finding is particularly important in the Nova Scotia context. Historically an out-migration province with an aging population, Nova Scotia has relied heavily in recent years on immigration and interprovincial migration to offset demographic pressures and support labour force growth.[83] Even modest increases in outward migration among skilled digital workers could have disproportionate impacts on long-term workforce sustainability.

Importantly, this creates a tension between sector-level optimism and individual-level decision-making. Workers can be confident that the digital economy will grow in Nova Scotia, while still choosing to pursue opportunities elsewhere if local conditions do not meet their expectations. This is particularly relevant in a context where digital skills are highly portable, and remote work provides access to external labour markets.

83 Nova Scotia Department of Finance and Treasury Board, "Quarterly Population Estimates, October – December 2025", March 18, 2026, https://novascotia.ca/finance/statistics/news.asp?id=21854#:~:text=From%20October%201%20to%20December%2031%2C%202025,have%20decelerated%20in%20the%20last%20two%20years.

Do you plan to remain working in Nova Scotia over the next 3–5 years?

Figure 28: Movement plans, Employee Survey, March-April 2026.

The factors influencing retention and outward mobility also reveal an important asymmetry:

Why stay?

Among workers planning to stay in Nova Scotia, lifestyle-related considerations dominate. Family and community connections, quality of life, and broader lifestyle preferences were the most frequently cited reasons for staying. Economic and career-related considerations played a comparatively secondary role for this group.

Why go?

Workers considering leaving the province cited mostly economic and professional motivations. Career advancement opportunities, compensation, affordability, access to larger labour markets emerged as the strongest drivers of potential out-migration. Importantly, these findings suggest that retention challenges are not solely about wages themselves, but rather about broader perceptions of long-term opportunity, ecosystem depth, and scalability.

All told, these findings point to a fundamental tension: Nova Scotia is relatively successful at attracting and retaining talent based on lifestyle and community factors, but faces growing risks for retaining talent over time. Workers may be willing to stay but are unlikely to do so at the expense of career progression or financial stability. Moreover, as cost-of-living pressures continue to rise, economic and career considerations are likely to become more prevalent in decision-making. Despite implementing measures such as higher minimum wages to better support struggling residents, overall affordability has been steadily declining in the province, and largely due to rising housing costs. According to research from real estate firm Turker Drake & Partners, the affordability burden was highest in Nova Scotia than in any other province, with "rental pressure" having an outsized role.[84]

84 CBC News, "Pressure on Renters is Higher in Nova Scotia than in Any Other Province, Analysis Finds", October 2025, https://www.cbc.ca/news/canada/nova-scotia/pressure-on-renters-is-higher-in-n-s-than-any-other-province-analysis-finds-9.6988188

In practice, this means that labour competitiveness is increasingly tied less just to job security and more to broader ecosystem quality and maturity, including a “critical mass”. Research shows that critical mass functions as an important structural condition for ecosystem sustainability. Larger and deeper ecosystems reduce career risk for workers by increasing the availability of job opportunities, advancement paths, and professional networks. At the same time, they strengthen innovation capacity, attract more and higher-quality investment, and generate spillover effects that further fuel competitiveness.

Ultimately, Nova Scotia’s long-term challenge is not simply attracting talent into the digital economy, but ensuring the ecosystem matures fast and substantially enough to support professional growth and economic resilience.

85 Mairead Matthews, Faun Rice, Context Matters: Strengthening the Impact of Foreign Direct Investment on Domestic Innovation (Ottawa: ICTC, May 5, 2022), https://ictc-ctic.ca/sites/default/files/ictc-admin/resources/admin/fdi-ip-canadian-innovation-2022.pdf

SECTION IV

FUTURE GROWTH SCENARIOS & STRATEGIC DRIVERS

This section examines the future growth trajectory of Nova Scotia's digital economy through two complementary lenses. First, it draws on direct employer engagement—including interviews, surveys, and a targeted employer workshop—to understand how firms perceive current growth conditions, opportunities, and constraints. Second, it introduces a scenario-based economic model that leverages key insights from primary research to display how different growth paths can shape employment, GDP, and wages.

Moreover, the findings also reinforce that future growth is unlikely to occur evenly across businesses, sub-industries, or regions. Instead, growth will increasingly depend on the interaction between the following interconnected factors: access to capital, technology adoption and diffusion, talent depth and experience retention, broader infrastructure capacity, and strong enabling policies.

Measuring the Digital Economy in Nova Scotia

The digital economy is defined using an industry-based approach that leverages NAICS classifications, detailed in the Appendix. While digital technologies are now present across most sectors, it remains impractical and inaccurate to label the entire economy as "digital". Instead, we identify industries in which digital activity accounts for a disproportionate share of output and employment and quantify the portion of those industries that can be considered digital. The model uses two complementary measures to achieve this:

- **Digital Intensity Adjusted Economy (core tech sector)** Selected NAICS industries are assigned explicit digital-intensity weights, reflecting the estimated share of activity that is genuinely digital. "Core" digital industries receive weights close to 1, while mixed industries such as media, professional services, manufacturing, and life sciences receive partial weights. Employment and GDP are measured at the NAICS level and then weighted before aggregation. This produces a conservative estimate of the model's "core digital economy".

- **Broad Digital + Adjacent Economy (digital economy)** The same set of industries is also aggregated without weighting, treating all included industries as fully in scope. This measure captures the broader economic footprint of digital and digitally adjacent activity and serves as an upper bound for comparison. Partial digital industries are handled transparently through weighting, allowing results to be interpreted under conservative and expansive definitions.

In 2025, core tech occupations accounted for just over 4% of total employment, while the digital economy accounted for just over 7%. For GDP, results show a similar difference: 6.5% versus 10.5%.

Employer Perspectives on Growth Conditions

In February 2026, a targeted employer workshop was held in Halifax with approximately 15 representatives from Nova Scotia's digital economy. Participants reflected a cross-section of the ecosystem, including organizations spanning ICT, ocean technology, technology consulting, digital health, legal services, financial services, and advanced technology industries; firms ranged from startup to established enterprises.

Across the workshop—as with the Employer and Employee Surveys—participants expressed broadly positive views regarding the future of Nova Scotia's digital economy and their own organizational outlooks. Many firms anticipated moderate to strong growth over the coming year, with several expecting significant expansion tied to commercialization activities, new business lines, or broader technology adoption (including major projects in some cases, like launching a new "innovation hub").

At the same time, participants repeatedly noted that Nova Scotia's challenge is not about creating startups or generating economic activity broadly, but instead about strengthening the conditions necessary for firms to scale sustainably over time. Several interconnected themes emerged throughout discussions:

- Difficulty recruiting experienced talent needed for scaling
- Difficulty sourcing specialized talent in emerging areas like AI
- Growing competition and from national and global labour markets
- Simultaneous upward pressure on wages alongside declining affordability
- Challenges accessing growth-stage capital and commercialization support
- Challenges expressing or quantifying the return on investment of technology projects (specifically felt among non-tech firms undergoing digitization)
- The need to boost labour productivity

Corroborating findings from this study, workshop employers generally did not frame talent challenges as a simple shortage of workers; again, the issue was commonly described as a mismatch between available talent and the experience, specialization, leadership, and commercialization capabilities. Mid- and senior-level workers—particularly in areas like systems architecture, cybersecurity, sales and business development, and product development—were consistently identified as the hard to fill. At the same time, employers repeatedly referenced the existence of a relatively large pool of junior workers seeking opportunities.

Employers also emphasized that Nova Scotia can no longer reliably position itself as a low-cost market for digital talent. Remote and hybrid work arrangements have increasingly integrated the province into national and global labour markets, allowing workers to access opportunities elsewhere while remaining physically located in Nova Scotia. Combined with rising housing costs and broader affordability pressures—particularly in Halifax—this has significantly altered labour market dynamics for firms attempting to recruit and retain experienced talent.

Participants further noted that barriers to growth are often mutually reinforcing. Limited access to capital constrains scaling and commercialization; weaker commercialization limits ecosystem visibility and investment attraction; and talent shortages slow productivity growth and operational expansion. The result is an ecosystem with strong momentum and opportunity, but structural impediments that constrain scale.

Strategic Growth Drivers

To better understand which conditions matter most for future growth, workshop participants completed a structured prioritization exercise focused on four interconnected drivers:

- Economic development
- Enabling policy
- Technology diffusion
- Talent

Participants allocated weighted "tokens" across these categories to indicate where they believed interventions would generate the greatest long-term impact for Nova Scotia's digital economy.

Importantly, the results suggest that employers increasingly view Nova Scotia's growth challenge as systemic. Growth is not constrained solely by talent shortages, investment gaps, or technology adoption in isolation; participants consistently emphasized the interaction between these factors and the broader conditions necessary to scale firms, improve productivity, and deepen the ecosystem over time.

Economic Development

Economic development surfaced as the strongest priority. Participants emphasized the importance of:

- Access to growth-stage capital (e.g., government-delivered or supported)
- Strong commercialization pathways (e.g., training, programs, and IP regimes)
- Retaining and scaling firms locally (e.g., creating the broader business environment and conditions to enable this)
- Attracting external investment into the province (e.g., increased visibility and active investment-attraction efforts)

Enabling Policy

Enabling policy emerged as the second most important growth driver. Rather than directly generating growth itself, enabling policy was seen as shaping the environment within which all other ecosystem activities operate. Participants emphasized the need for:

- Greater policy stability beyond political cycles (e.g., aligning on core “anchors” for the digital economy)
- Better alignment between provincial, regional, and federal programs (e.g., reducing duplication and/or inconsistencies)
- Incentives supporting productivity, commercialization, and scaling (e.g., tax incentives, rebates)
- Reduced fragmentation across government systems (e.g., enhancing the user experience when applying for funding and/or otherwise navigating procurement)

Technology Diffusion

Technology diffusion was framed primarily as a productivity and competitiveness driver. Participants emphasized two interconnected dimensions:

- Technology development and commercialization (e.g., developing and selling market-ready digital products)
- Technology adoption and operational integration across sectors (e.g., technology adoption and enhancement across the broader economy)

Talent

Interestingly, talent ranked last among the four strategic growth drivers, with one group allocating no “tokens” to it at all. This does not imply that talent is unimportant. Instead, employers consistently framed talent as a downstream constraint shaped by broader ecosystem conditions, not an isolated driver itself. Participants repeatedly emphasized that:

- General labour supply exists, and there is an oversaturation of junior-level talent
- The depth and quality of talent is lacking; including a shortage of experienced workers, and at times broader skill alignment
- Talent outcomes (e.g., plugging real gaps) are heavily influenced by investment, business growth, compensation competitiveness, and ecosystem depth

Collectively, these findings reinforce a central conclusion underpinning this study: Nova Scotia’s digital economy is no longer primarily constrained by ecosystem creation. Instead, the province’s long-term challenge increasingly revolves around scaling productivity, commercialization, investment intensity, and organizational maturity needed to sustain long-term growth and competitiveness.

Modelling Approach & Scenario Design

The economic model itself is structured as a scenario-based vector autoregression (VAR), designed to capture the interconnected evolution of employment, GDP, and productivity under different growth environments. Three core outcomes are modelled jointly:

- Digital employment
- Digital real GDP
- Productivity, proxied through compensation per hour worked

Rather than attempting to estimate strict causal relationships, the framework prioritizes internal consistency across scenarios while grounding assumptions in historical data, employer engagement, and broader economic research. Four primary variables were incorporated into the modelling framework:

- Technology capital investment
- Net migration
- Housing affordability pressures
- External technology demand

Among these variables, technology capital intensity emerged as the primary differentiator across scenarios. This aligns closely with workshop findings emphasizing investment capacity, commercialization readiness, scaling, and productivity growth as the key drivers.

Migration and external demand were treated more as enabling conditions than primary drivers of divergence between scenarios. Employers repeatedly emphasized that attracting talent matters, but labour supply alone is insufficient without the organizational capacity, productivity, and investment conditions to absorb and leverage that talent effectively.

Housing affordability was also incorporated as an increasingly important system constraint. Across all scenarios, housing costs continue rising over time, though more rapidly under stronger growth trajectories. This reflects broader concerns surfaced throughout employer and worker engagement regarding affordability pressures and long-term competitiveness.

The model generates three internally consistent growth trajectories for Nova Scotia's digital economy through to 2029:

- A baseline (status quo) scenario
- A moderate-growth scenario
- A high-growth scenario

Divergence across scenarios becomes increasingly pronounced over time, driven primarily by differences in investment intensity, productivity growth, commercialization capacity, and technology adoption. In other words, relatively small differences in investment and ecosystem capacity compound over time, producing materially different economic outcomes in employment, wages, productivity, and GDP.

Employment Outcomes

Employment grows steadily under all three scenarios, though the scale of growth diverges meaningfully over time. By 2029:

The baseline scenario projects approximately 22,700 core tech jobs and roughly 38,700 jobs across the broader digital economy

The moderate-growth scenario increases core tech job growth to 24,000 and just over 40,000 jobs across the broader digital economy

The high-growth scenario projects more than 25,000 core tech jobs and over 42,000 jobs across the broader digital economy

Nova Scotia Tech Sector Employment

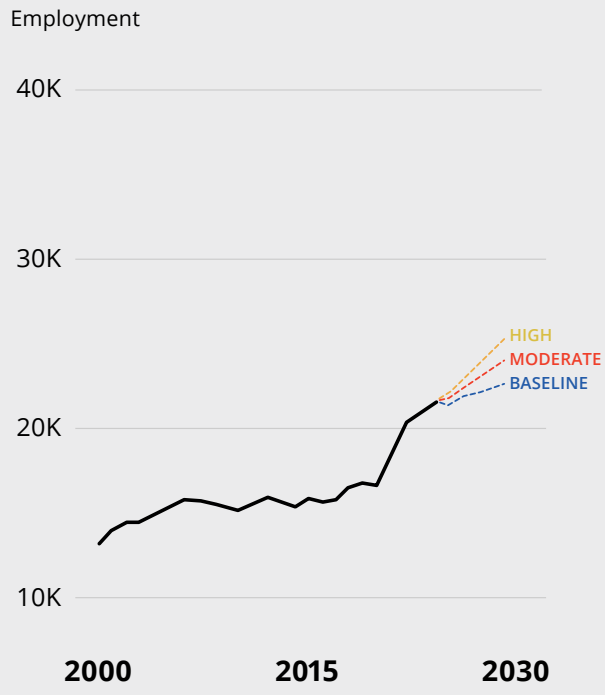


Figure 29: Core digital employment scenarios, updated April 2026.

Nova Scotia Digital Economy Employment

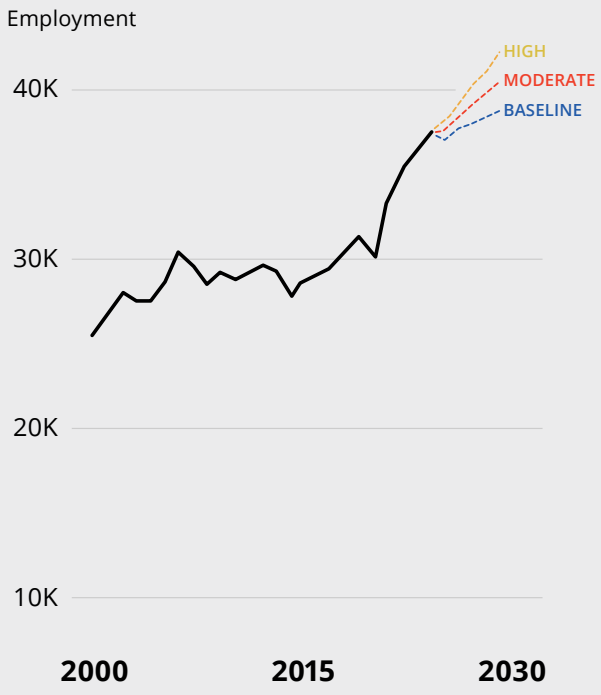


Figure 30: Core + adjacent digital employment scenarios, updated April 2026.

GDP Outcomes

Differences across GDP trajectories are even more pronounced. By 2029:

The baseline scenario projects that core tech GDP reaches approximately $3.35 billion, while the broader digital economy reaches approximately $5.56 billion

The moderate-growth scenario projects that core tech GDP increases to approximately $3.57 billion and digital economy GDP reaches $5.82 billion

The high-growth scenario finds that core tech GDP reaches approximately $3.79 billion, while the broader digital economy exceeds $6 billion

Importantly, GDP growth outpaces employment growth under the higher-growth scenarios. This is because stronger outcomes are driven not just by adding more workers to the economy, but by broader improvements in productivity, operational capability, technology adoption, and investment.

Nova Scotia Tech Sector GDP

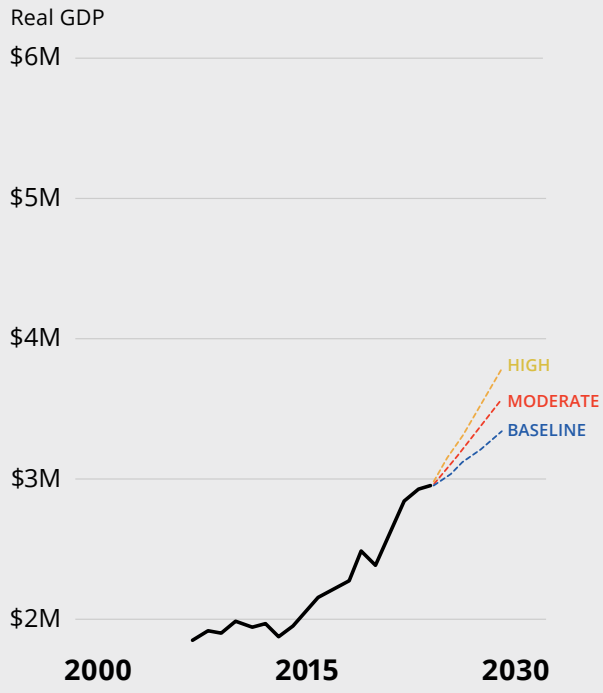


Figure 31: Core GDP scenarios, updated April 2026.

Nova Scotia Digital Economy GDP

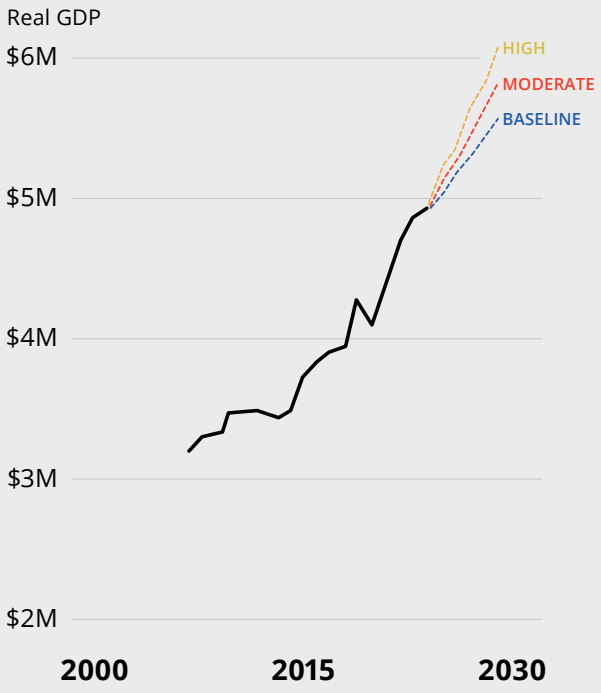


Figure 32: Core + adjacent digital GDP scenarios, updated April 2026.

Productivity Outcomes

Like employment, productivity (proxied by compensation per hour) grows steadily under all three scenarios, but growth is strongest under the high-growth case, reflecting a greater concentration of higher-value activities being completed across the labour market. By 2029:

The baseline scenario projects an average wage of $59/h for core tech jobs and $57/h across the broader digital economy

The moderate-growth scenario increases core tech wages to $62/h and just over $59/h across the broader digital economy

The high-growth scenario projects that core tech wages will reach $65/h and broader digital economy wages will reach $62/h

Core tech wages come with an additional premium to start and rise faster, reflecting heightened competition for and specialization of these roles, versus the broader digital economy. Moreover, these compensation levels should be interpreted as reflecting a maturing digital economy with a higher concentration of experienced, higher-productivity roles, rather than as across-the-board wage increases or increases for junior-level talent.

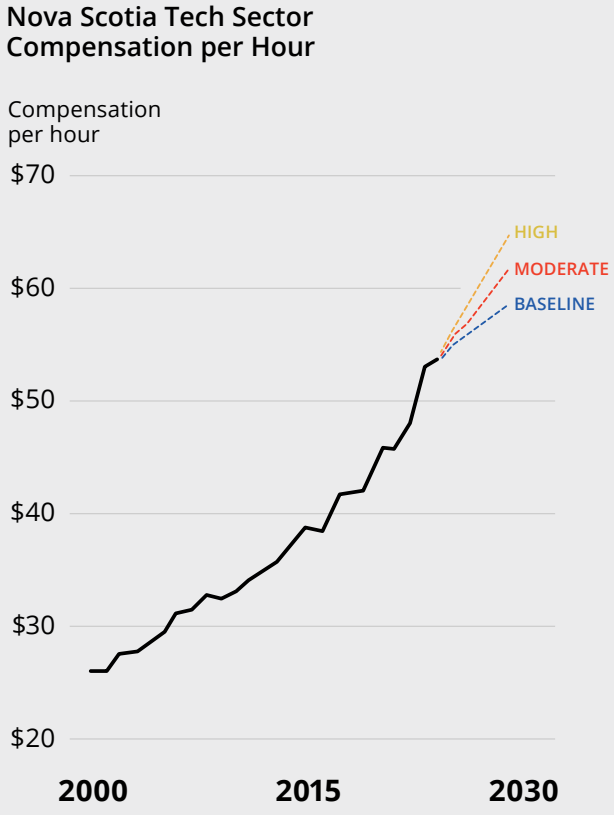


Figure 33: Core compensation per hour (core tech compensation) scenarios, updated April 2026; Source: Statistics Canada, Macrobond; custom definition for the digital economy.

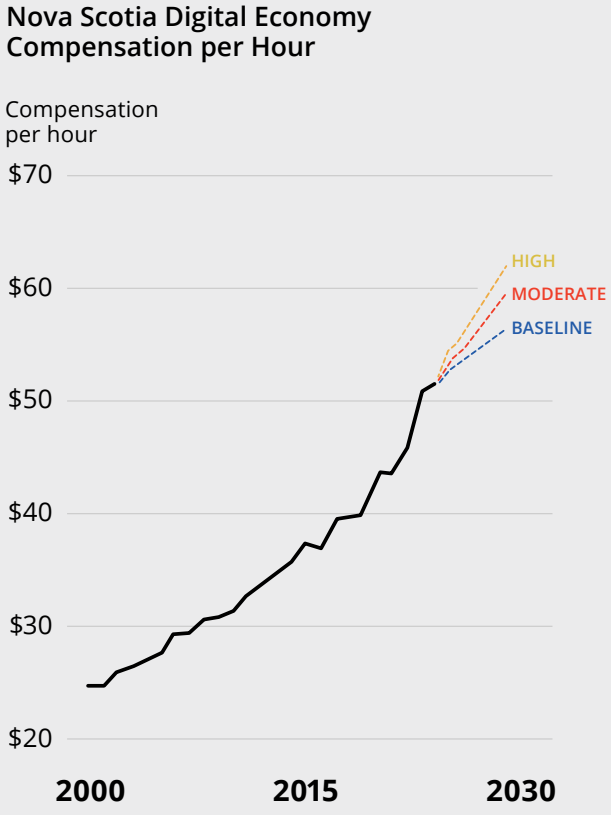


Figure 34: Core + adjacent compensation per hour (digital economy compensation per hour) scenarios, updated April 2026; Source: Statistics Canada, Macrobond; custom definition for the digital economy.

The Opportunity Cost of Slower Growth

One of the model's most important contributions is its ability to estimate the opportunity cost associated with slower growth trajectories. Relative to the high-growth scenario, the baseline path results in the following across the digital economy by 2029:

- Over 3,450 fewer jobs
- Over $500 million lost GDP

While these differences may appear moderate in absolute terms, they are economically meaningful within the context of Nova Scotia's economy. For example, the impact of jobs left on the table is larger than Nova Scotia's total agriculture sector; the impact of GDP left on the table is larger than two investments the size of the One Patient One Record initiative, a major public sector transformation undertaking.

Additionally, as the impacts of growth compound over time, so do the impacts of foregone growth. Slower growth reduces not only direct employment and GDP gains, but also broader spillover effects tied to employment multipliers (indirect jobs, induced jobs), investment attraction, productivity, and talent development.

SECTION V

ENABLERS & GAPS

Nova Scotia's digital economy benefits from a relatively well-connected innovation support ecosystem, particularly at the early stages of company development and product ideation. Across interviews, workshops, and survey responses, the province's strong founder support environment, collaborative ecosystem, and network of organizations supporting entrepreneurship, research, and early-stage development were consistently highlighted.

At the same time, the ecosystem's success and increasing maturity means that it is now encountering a different and more complex challenge: scaling innovation, expanding market access, and creating anchor companies that drive exponential value for Nova Scotia.

This distinction is important. Nova Scotia is effective at producing startups, enabling early experimentation and research, and supporting initial market traction. However, the ecosystem is less consistently able to ensure sustained capital investment, accelerate commercialization, and drive market expansion needed scale firms and economic value in the long run.

This misalignment is reflected in the economic model. Across all scenarios, differences in long-term GDP, employment, and wages are driven primarily by variations in technology-related capital investment and productivity growth, not by volume. Put otherwise, the strongest economic outcomes are not dependent on creating more firms or drastically expanding labour supply; it happens when firms can better commercialize products, invest back into their businesses, adopt transformative technologies across their value changes, and improve labour and operational productivity.

Enablers

Early-State Innovation Ecosystem

Nova Scotia has developed a comparatively strong ecosystem supporting early-stage innovation and startup growth. Public grants and programs, incubators, accelerators, post-secondary institutions, and industry organizations all help reduce barriers to entry and lower risks associated with ideation and entrepreneurship. These and other wrap-around supports play an important role in helping firms:

- Test and validate ideas and prototypes
- Conduct market research and customer segmentation
- Access mentorship and other expertise
- Develop initial products and services
- Build early customer interest
- Navigate early commercialization pathways
- Begin to access local markets

Interviewees consistently described Nova Scotia as highly collaborative relative to larger ecosystems, with founders often sharing ideas, resources, and lived experiences. Moreover, the province's smaller size and concentration of activity in Halifax was often viewed as an advantage for early-stage networking, relationship-building, and ecosystem navigation.

Nova Scotia is increasingly developing a unique innovation identity across specialized industries, including ocean technology, defence technology, life sciences, and clean technology. While the province may not be able to compete with larger technology hubs on scale, it can make its mark through specialization tied to existing regional strengths.

Post-Secondaries & Research Capacity

Nova Scotia benefits from a uniquely dense concentration of post-secondary institutions and research infrastructure relative to its size. Universities, colleges, research centres, and sector-specific innovation hubs play an important role in supporting talent development, research & development (R&D), and broader industry collaboration.

Post-secondary and other research institutions across the province support capabilities in key areas including ocean technology, cybersecurity, argi-foods and agtech, life sciences, engineering, and defence.

Employers frequently highlighted the value of both applied research and industry-connected education pathways; co-op programs, internships, work-integrated learning, and collaborative research partnerships were seen as key to connecting firms with emerging talent while providing youth with critical practical application and real-life work experience.

Participants also emphasized the role that post-secondary institutions play as ecosystem anchors in smaller and rural communities; here, they often function as major sources of innovation activity, and workforce and economic development.

Collaborative Culture

Nova Scotia benefits from a broad network of publicly funded innovation organizations, hubs, accelerators, industry associations, and regional development agencies. Beyond funding for entrepreneurs, these organizations often provide essential resources and supports that futher build the ecosystem. These include:

- Shared infrastructure, including markerspaces, co-working spaces, and applied research facilities and materials
- Cross-cutting programming, including for workforce development and training, investment attraction and pitch competitions, and market expansion
- Mentorship and advisory supports
- Networking, events, and other ecosystem activities
- Connections to customers, collaborators, and investors
- Talent and recruitment support

Participants consistently highlighted the ecosystem's ability to convene organizations and support collaboration across sectors and stakeholder groups, particularly during early-stage growth. Compared to larger ecosystems, Nova Scotia's technology ecosystem was often described as accessible, relationship-driven, and indexing on collaboration over competition.

This culture was identified as one of the province's defining and somewhat advantages, particularly in emerging or interdisciplinary areas where partnerships between industry, academia, government, and ecosystem organizations are critical.

Increasing Pan-Economy Technology Adoption

Nova Scotia increasingly demonstrates technology experimentation and adoption activity across the economy, particularly within marine, defence, healthcare, and manufacturing industries.

Moreover, pilot initiatives, broad innovation programs, and targeted technology adoption incentives are increasingly helping firms across the economy test and deploy technologies; this creates greater demand for local digital products and services.

Gaps

Insufficient Capital Deepening for Scale

The clearest structural gap identified throughout this study relates to capital deepening and investment needed to scale.

While Nova Scotia offers meaningful support for startup creation and early-stage validation, there are significantly fewer mechanisms available to support sustained and large-scale investment in essential enablers, including automation and advanced computing, AI infrastructure, product commercialization, market expansion, and operational scaling.

The economic model demonstrates that long-term divergence across growth scenarios is driven primarily by differences in technology-related capital investment and productivity enhancement, not in overall physical footprint of the ecosystem. Again, employers repeatedly emphasized that the province's challenge is not simply helping firms start, but helping them continue investing as they mature.

Fragmented Scaling Pathways

Beyond capital, as firms move beyond validation and early traction, the support landscape also becomes increasingly fragmented. Participants consistently described a "missing middle" between startup and scale-up supports and services. While early-stage programs were described as relatively available, there are fewer coordinated mechanisms supporting:

- Growth-stage product commercialization
- Scaling operations
- Export readiness
- Systems modernization
- Skilled talent attraction
- Market expansion
- Organizational maturity
- Leadership training

Mid and Senior-Level Talent

Across interviews, workshops, employer surveys, and employee surveys, the most persistent labour market challenge identified was a shortage of experienced talent, particularly in the following areas:

- Software development
- Cybersecurity
- AI and machine learning
- Product commercialization
- Business development and sales
- Market expansion
- Operations

This imbalance between talent demand (mid-and-senior-level workers) and talent supply (entry-level and early-career talent) is a critical structural experience gap that radiates across the ecosystem. When firms struggle to recruit or retain senior leadership and specialized expertise, they also struggle to scale organizations, commercialize products, enter new markets, and manage increasingly complex operational environments.

Limited Ecosystem Depth (Critical Mass)

A recurring theme throughout the study was the issue of critical mass. While Nova Scotia has developed meaningful growth and specialization over the years, and the employment and economic impact of that growth is substantial, the ecosystem remains small compared to larger Canadian technology hubs. This has implications not only for investment attraction, but also for worker retention, labour market mobility, and long-term ecosystem resilience. Although workers expressed confidence in the future of Nova Scotia's digital economy overall, they also expressed uncertainty about their own long-term career trajectories in the province. At the same time employers and the broader ecosystem are also impacted. Examples of challenges associated with limited ecosystem depth include:

- Ecosystem: investment attraction, deal negotiation, innovation, growth
- Employers: attracting skilled talent, retaining skilled talent, knowledge transfer and idea exchange, investment attraction
- Workers: fewer employment opportunities, fewer career advancement opportunities, limited lateral career movement

Limited IP Retention Capacity

A recurring theme throughout interviews and workshops was concern regarding the long-term retention of intellectual property and high-value economic activity within Nova Scotia.

Participants frequently noted that firms may develop IP locally, including sometimes with public funds, but that they tend to commercialize, scale, or "exit" outside the province. While this is a larger problem, spanning the entire Canadian digital economy, impacts may be more pronounced for Nova Scotia given the small market. When "exits" happen, Nova Scotia risks losing not just the firms themselves, but also high-quality jobs, tax revenues, productivity gains, and broader spillover effects.

Current incentive structures are heavily weighted toward innovation inputs like R&D, startup formation, and experimentation, versus commercialization outcomes, scaling, or IP retention.

Inclusion and Workforce Participation

Findings from the Employee Survey also point toward potential broader participation and inclusion gaps within Nova Scotia's digital economy.

Women, newcomers, racialized communities, persons with disabilities, and other underrepresented groups remain largely underrepresented across the ecosystem, particularly within technical and leadership roles. At the same time, nearly one-third of respondents reported experiencing barriers or discrimination related to their identity, suggesting that inclusion challenges remain a meaningful issue.

These dynamics carry implications not only for equity outcomes, but also for labour force resilience. In a province facing demographic pressures and ongoing talent constraints, limited participation among underrepresented groups represents a significant lost opportunity to grow workforce capacity and broaden the talent pipeline.

Conclusion

Nova Scotia's digital economy is a central pillar of the provincial economy. Increasingly embedded across industries, digital technologies are driving productivity, innovation, modernization, and competitiveness.

Yet, the digital economy is entering an important inflection point. Findings from this study suggest that future growth will be driven less by labour force expansion, and instead, increasingly by capital deepening and enabling economic and policy conditions. Talent remains important; however, the key constraint is increasingly tied to experience and specialization, not absolute labour supply. Employers consistently identified shortages in experienced mid- and senior-level talent as a significant barrier.

The analysis further suggests that Nova Scotia's current ecosystem supports are comparatively effective at enabling startup formation and early-stage innovation, but less often aligned to the conditions needed for scaling, and long-term value capture. Without targeted action, the province risks foregoing significant economic gains, including thousands of jobs, stronger wage growth, and hundreds of millions of dollars in additional GDP.

Ultimately, Nova Scotia's long-term opportunity is not just becoming "more digital," but leveraging technology to become more productive, scalable, and globally competitive. Realizing this opportunity will increasingly depend on the province's ability to deepen investment, accelerate technology diffusion across industries, and build ecosystem depth.

APPENDIX

Research Methodology

This study used a mixed-methods approach, combining secondary research and primary data to develop a comprehensive understanding of Nova Scotia's digital economy, its growth trajectory, and the economic, structural, and labour-market dynamics shaping it.

Secondary Research and Knowledge Synthesis

Robust secondary research and analysis was conducted to establish the foundational evidence base for the study, and validate or bring nuance to primary insights. This included:

- **Literature Review** A comprehensive review of academic literature, grey literature, and industry reports examining topics including digital economy growth and transformation, labour market dynamics and workforce trends, economic development and investment drivers, policy levers and interventions supporting sector growth. The review spanned Nova Scotia, Canada, and international jurisdictions where relevant, enabling both local context and comparative insights.
- **Data Analysis** Quantitative secondary data analysis was conducted to contextualize findings and validate trends identified in the literature. Among others, data sources focused on macroeconomic indicators (e.g., GDP growth, productivity), labour market data (e.g., employment, unemployment, labour force participation), sectoral data, investment and capital flows, trade and export activity. Data was analyzed at provincial and national levels, providing an important perspective on performance and positioning.
- **Job Postings Analysis** A longitudinal analysis of thousands of job postings sourced from the Digital Nova Scotia job board (2014–2026) was conducted to assess evolving labour market demand in the province's digital economy.

Primary Research

Extensive primary research was conducted to generate Nova Scotia-specific, real-time insights directly from employers and workers across the digital economy. This helped to paint a robust picture of labour demand, supply, and economic needs directly anchored in local context. Activities were:

- **Key Informant Interviews (n=10)** Interviews were conducted with digital economy employers and sector leaders in Nova Scotia. Each interview lasted approximately one hour. Among other topics, they explored current and future hiring needs, workforce challenges and talent gaps, investment priorities and growth plans, retention challenges and other workforce or economic pressures.
- **Employer Workshop (n=15)** A facilitated workshop with digital economy employers across Nova Scotia was held in February 2026. The workshop lasted four hours and was conducted to identify priority growth opportunities for Nova Scotia's digital economy, surface key barriers, enablers, and system-level gaps, and validate and refine potential economic and policy levers to support future growth. The insights from this workshop were used to support and refine the economic model.
- **Employer Survey (n=73)** A structured survey of Nova Scotian digital economy employers was developed and disseminated. The survey included approximately 35 questions, designed to capture qualitative and quantitative demand-side insights. Among other topics, the survey covered firm growth trajectories and sector outlook, hiring demand (expansion and contraction), hard and soft skill requirements for workers, access to and use of ecosystem supports, key gaps and constraints to growth.
- **Employee Survey (n=557)** Complementing the Employer Survey, a large-scale survey of digital economy workers in Nova Scotia was developed and disseminated. The survey included approximately 40 questions, designed to capture qualitative and quantitative supply-side insights. Among other topics, the survey covered perceptions of sector growth and opportunity, career progression and skills development, compensation and employment conditions, job retention and mobility (push and pull factors influencing decisions to stay or leave Nova Scotia), and demographic characteristics.

Economic Model

To assess the future trajectory of Nova Scotia's digital economy, this study uses a scenario-based vector autoregression (VAR) model. The model simulates internally consistent growth pathways under different assumptions, not to estimate causal relationships or generate point forecasts.

Model Structure

The model captures the joint evolution of three core dimensions of the digital economy: digital employment, digital real GDP, and productivity, proxied by compensation per hour. These variables are treated as endogenous and modelled jointly within the VAR framework. All variables are expressed in log differences, enabling the model to focus on growth dynamics while preserving the structural relationships between employment, output, and productivity.

Data Inputs and Validation

The model is built primarily on data from Statistics Canada's System of National Accounts (SNA), which provides internally consistent provincial estimates of: employment, real GDP, compensation, and hours worked.

These data form the foundation for constructing digital economy indicators, including employment, output, productivity, and compensation. Industry-level data are accessed via Macrobond, drawing directly from SNA tables. These data are used to: aggregate digital activity across industries, apply digital-intensity weightings, derive consistent productivity and compensation measures across sectors and over time.

The Labour Force Survey (LFS) is used only for macro-level labour market context, including: total employment and labour force, population and participation rates, and unemployment. These series are used to calculate digital economy shares and benchmark results against the broader provincial labour market. The LFS is not used to construct industry-level digital economy measures.

In addition to core SNA data, the model incorporates a limited set of external indicators aligned with the exogenous drivers: technology-related capital stock, representing investment in digital assets; net migration, capturing labour supply and talent flows; housing costs, proxied by the CPI rent index; and external demand, proxied by the TSX technology index. These indicators are used to define scenario assumptions and introduce variation across growth pathways.

All data series are transformed to ensure consistency and suitability for time-series modelling, including: conversion to real terms where relevant, normalization of units across datasets, and transformation to log differences to capture growth.

Reconciliation checks are applied across all core variables to ensure internal consistency between employment, output, compensation, and productivity measures over time.

Research Limitations

While this study is grounded in robust data and a comprehensive mixed-methods approach, several limitations should be considered when interpreting the findings.

Secondary Research

- **Data Availability** Secondary data sources vary in frequency, coverage, and timeliness. Some indicators are also subject to time lags, changes, or suppression, which may affect precision and comparability over time.

- **Comparability** Differences in definitions, methodologies, and standards across provinces limit the ability to make fully consistent comparisons of the digital economy. For this reason, our estimates of total workforce and/or economic impact may differ from other studies.

- **Measurement of the Digital Economy** The digital economy is not directly observed in standard statistical data and is often built using proxies (e.g., industry classifications, digital intensity measures). As a result, estimates are not exhaustive.

- **Job Postings Data Limitations** Job postings reflect employer demand signals and the frequency of skill or requirements posted. They do not capture unadvertised roles, internal hiring, "ghost" jobs, actual hiring outcomes, vacancy fulfillment, consistent wage information, or skill importance.

Primary Research

- **Representation** While the study includes a strong sample of employers (n=73) and employees (n=557), they cannot be seen as a completely accurate picture of demand and supply in the digital economy. For example, results may not fully represent all subsectors within the digital economy, smaller firms or underrepresented groups, informal or emerging areas of digital activity.

- **Response Bias** Survey and interview responses are subject to self-reporting bias, including over- or under-estimation of growth expectations, perception-based responses on skills, opportunities, and barriers, satisfaction, etc.

- **Point-in-Time Insights** Primary research captures current sentiment and conditions. Although this data is used to shape future growth estimates, these insights may shift over time in response to economic, technological, or policy changes.

- **Qualitative Findings** Insights from key informant interviews and workshops are meant to be seen as high-level and interpretive. While valuable for identifying themes and validating findings, they are not statistically generalizable.

Economic Modelling

- **Industry Classification Constraints** The definition of the digital economy used in this analysis relies on NAICS-based industry groupings and fixed digital intensity weights. While grounded in observable data, this approach simplifies the digital intensity within industries. In reality, digital activity varies significantly across firms within the same industry, and digitally enabled activity embedded in traditionally non-digital sectors may not be fully captured. As a result, estimates should be interpreted as representing the core and digital-adjacent economy, rather than an exact measure of all digital activity.

- **Illustrative Nature of Scenario Assumptions** The scenario analysis is designed to explore plausible alternative growth pathways, not to estimate causal effects of specific policies or interventions. Findings should be interpreted as internally potential scenarios, not forecasts or predictions based on specific policies.

- **Model Constraints** The use of a VAR framework focuses on statistical relationships and co-movements between variables, not on structural economic relationships. As such, the model does not capture all potential feedback loops or structural breaks, and it is not designed to explicitly model policy interventions.

- **Exogenous Driver Simplification** Key growth drivers (e.g., capital investment, migration, housing, external demand) are represented using proxy variables, which may not fully capture their complexity or interactions.

Digital Economy Definition (NAICS)

NAICS	DESCRIPTION	% OF DIGITAL ECONOMY	RATIONALE
334	Computer & Electronic Product Manufacturing	85	Semiconductors, electronic components, comms equipment. Some non-digital electronics remain, so not full 100%. Still clearly tech hardware.
5112	Software Publishers	100	Pure digital output. No meaningful non-digital activity.
517	Telecommunications	90	Digital infrastructure. Some legacy voice services, but increasingly data-driven.
518	Data Processing, Hosting, Cloud	100	Cloud, hosting, data centers. Pure digital infrastructure.
519	Other Information Services	75	Includes web portals, data aggregation, platforms. Some mixed legacy services.

NAICS	DESCRIPTION	% OF DIGITAL ECONOMY	RATIONALE
5415	Computer Systems Design & Related Services	100	Software development, systems integration, cybersecurity. Minor consulting overhead only.
512	Motion Picture & Sound Recording	55	Content is increasingly digital. Production still physical, creative labour-heavy.
5151	Radio & Television Broadcasting	40	Legacy broadcast + digital streaming overlap. Digital distribution growing but not dominant.
511 (exc. 5112)	Publishing (except Internet)	25	Print-heavy by definition. Digital workflows exist but output still largely non-digital.
333	Machinery Manufacturing	40	Automation, robotics, CNC, industrial controls. Still largely mechanical output.
335	Electrical Equipment Manufacturing	50	Power electronics, control systems, grid hardware. Critical digital inputs, but physical products.
336	Transportation Equipment Manufacturing	35	Aerospace, EVs, autonomy on one end. Traditional vehicle manufacturing on the other.
325 (exc. 3254)	Chemical Manufacturing (excl. pharma)	10	Mostly non-digital. Some advanced materials and process automation.
3254	Pharmaceutical & Medicine Manufacturing	50	Bioinformatics, AI drug discovery, data-heavy R&D. Final output still physical medicines.
5417	Scientific R&D Services	60	Heavy use of modeling, simulation, data. Mix of wet-lab and computational work.
5416	Management, Scientific & Technical Consulting	40	Digitally intensive work. Output is advice, not digital goods.
54 (exc. 5415-17)	Professional, scientific & technical services	20	Residual of NAICS 54 outside core tech/R&D/consulting. Some digital intensity but mostly not “core”.