How Do Labour Shortages, Artificial Intelligence, and Trump Tariffs Affect Businesses and Immigrant Hiring in Atlantic Canada?

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Executive Summary

Stagnant economic growth characterized the last few decades in Canada, as our nation fell behind other advanced economies in labour productivity gains. Despite the longstanding nature of this issue, policymakers remain divided about the primary causes of the problem and the best way forward to a more resilient economy. Among policymakers, one area of broad consensus is the critical role that small and medium-sized enterprises (SMEs) must play in closing the productivity gap. SMEs account for the majority of private sector employment in Canada (88.2% as of 2021, Jiang and Sekkel, 2024), and our nation has a notably larger share of SMEs and employment in SMEs relative to other advanced economies. Therefore, the success of the Canadian economy is largely contingent on the success of our smaller businesses.

Despite their critical role in the economy, small and medium-sized enterprises often lack the resources available to larger organizations. This makes it more difficult for them to attract and retain talents, contributing to persistent labour and skill shortages. These challenges are especially acute in Atlantic Canada, where declining fertility rates, an ageing population, and continued youth outmigration further constrain the labour supply. In recent times, provinces in the Atlantic region have increasingly relied on immigrants to address human resource constraints. Although most business owners and executives recognize the importance of investing in immigrant recruitment and retention, many cite financial and time constraints as key barriers to addressing these needs.

This study draws on responses from 1,700 senior executives and business owners who participated in a national survey. Although the survey covers Canada broadly, our analysis focuses specifically on SMEs in Atlantic Canada to better understand how capacity constraints interact with the region's unique socioeconomic landscape. We explore how labour-related challenges, shaped by evolving digital technologies and U.S. tariffs, are affecting skill demands, hiring practices, and organizational capacity and performance. Through this, we aim to provide timely, evidence-based insights to inform public policy and business practices in the region.

Key Results

Hiring Challenges.

- Slightly below one-third of Atlantic Canadian firms (32.8%) experienced hiring challenges in the last six months, a higher rate than that observed elsewhere in Canada (27.8%).
- Large, older, and secondary sector firms were most likely to report hiring difficulties.
- New Brunswick (35.5%) faced the highest rate of hiring challenges, followed by PEI (34.6%), Nova Scotia (33.0%), and Newfoundland and Labrador (27.7%).
- Among Atlantic Canadian firms who experienced hiring difficulties, the leading reason was difficulty attracting candidates (38.3%), a rate notably higher than in the rest of Canada (31.2%).
- Businesses in Prince Edward Island (44.8%) and Nova Scotia (41.0%) were most likely to struggle attracting applicants.
- Firms in Atlantic Canada also cited lack of education, experience, and skills as reasons for human resource constraints at higher rates than the rest of Canada.

- Respondents in New Brunswick (39.1%) and Nova Scotia (37.0%) were most likely to report a lack of skills among applicants.

Immigrant Hiring Practices.

- Fewer than half (45.3%) of Atlantic Canadian businesses reported hiring immigrants within the past three years, compared with 50.8% in the rest of Canada.
- Companies with immigrants in senior management were more likely to have hired immigrants (70.9%) than their counterparts (42.4%).
- Firms facing hiring difficulties were significantly more likely to hire immigrants (54.0%) than those not experiencing such challenges (41.1%).
- Firms in PEI were most likely to have hired immigrants (54.0%), while those in Newfoundland and Labrador (34.9%) were least likely to have done so.
- Large, younger, and service sector firms were most likely to hire immigrants.
- The vast majority (77.5%) of Atlantic Canadian respondents reported either 'very positive' or 'positive' experiences with their immigrant hires, about the same as the rest of Canada (78.1%).
- Firms in Newfoundland and Labrador were among the most likely to report such positive experiences (85.7%), while those in New Brunswick were least likely (71.6%).
- Among respondents who reported positive experiences, a strong majority (67.6%) attributed this to immigrants' strong work ethic.

Future Immigrant Hiring and Retention.

- More than two in three (69.3%) respondents indicated that they were willing to hire immigrants in the future, a rate greater than that elsewhere in Canada (59.7%).
- Respondents based in Prince Edward Island were most likely to express willingness to hire immigrants (79.1%), with little variation between the other Atlantic provinces.
- Large, older, and service sector firms are most likely to express this willingness.
- About one in three (34.9%) Atlantic Canadian firms said the immigrants they hired in the last three years were still with the firm. Retention was highest in Nova Scotia (36.8%) and was lowest in PEI (27.3%).
- For those who did not retain immigrant workers, they most commonly reported that they had been hired by a different company (25.3%) or left the province (15.6%).
- Immigrant workers were more likely to leave the province in Atlantic Canada (15.4%) than in the rest of Canada (7.4%).

Artificial Intelligence Adoption.

- One in four Atlantic Canadian firms (24.6%) reported adopting artificial intelligence (AI), compared with 30.4% in the rest of Canada.
- Prince Edward Island was the most likely to adopt AI (34.1%), followed by Nova Scotia (30.3%), Newfoundland and Labrador (19.4%), and New Brunswick (18.6%).
- Large, young, and knowledge-based firms were most likely to implement AI.
- Firms in Atlantic Canada use AI across various business areas, including marketing/advertising (62.1%), productivity (55.3%), and product design (43.1%).
- Atlantic Canadian firms were more likely than those elsewhere to use AI in human resource management (16.0% vs. 12.9%), although adoption remained low overall.

- AI implementation was said to have improved operational efficiency (64.4%), personalized marketing and sales (59.7%), and organizational productivity (53.7%).

Skill Needs.

- Most businesses did not specify their future skill needs or desired training in response to an increasingly digital work environment.
- The most cited desirable skill was digital literacy, though firms in Atlantic Canada were less likely than those in the rest of Canada to identify it (18.7% vs. 21.3%).
- Most Atlantic Canada employers prioritized compliance-oriented training, such as industry certification (21.4%), over upskilling or digital advancement.

Artificial Intelligence and Immigrant Workers.

- In Atlantic Canada, the share of firms hiring immigrants and willing to hire immigrants is very similar between AI adopters and non-adopters (45.8% vs. 45.1%).
- Elsewhere in the country, AI adopters were more likely to hire immigrants than their counterparts (58.0% vs. 47.7%) and more likely to express willingness to hire.
- The majority of respondents have not considered the potential role of AI in facilitating newcomer integration among those who responded to the question (26.3% out of 54.1%), in both Atlantic Canada and elsewhere in the country.
- The most common applications of AI in immigrant-centred supports were language training (15.2%), cross-cultural communication (7.2%), and job-specific training (6.4%).

Impacts from Trump Tariffs.

- Most Atlantic Canadian respondents from exporting firms anticipated negative impacts from U.S. tariffs (67.5%), a comparable rate to the rest of Canada (65.5%).
- Respondents in Newfoundland and Labrador (81.8%) were most likely to report anticipated negative impacts by a sizeable margin.
- The most commonly anticipated impacts were on revenue (23.3%), followed by price increases in their products and services (18.4%), and changes to their market for exports (18.0%).
- Relative to the rest of Canada, the Atlantic region was more likely to anticipate adverse impacts on revenue, cost of raw materials, and prices of products and services.
- Few firms anticipated negative impacts on employment (9.3% vs. 2.9%) or investment plans (4.7% vs. 5.9%).

Firm Responses to Tariffs.

- The majority of Atlantic Canadian firms expressed a willingness to expand exports to new international markets (62.5%).
- Respondents most frequently cited the European Union as a promising market (21.9%), followed by the United Kingdom (7.6%), Australia (4.6%), and Japan (4.6%).
- The majority of Atlantic Canadian firms expressed a willingness to expand exports to domestic markets (72.7%).
- Respondents most frequently cited Ontario as a promising market (41.2%), followed by the Quebec (32.3%), and Prince Edward Island (28.8%).

- Firms outside the Atlantic region most often identified Ontario (39.1%), BC (38.1%), and Alberta (34.0%) as target markets for expansion.

Implications

For employers:

- Leverage digital technologies in human resource management to streamline recruitment and attract more qualified candidates, helping to address hiring challenges.
- Develop strategies and collaborate with settlement agencies to tap into international talent pools.
- Identify ways to use digital tools to support the integration and retention of immigrant employees, including language training, cross-cultural communication, and multilingual services.
- As the economy becomes increasingly digital, assess the skills your business will need in the short term. Consider training programs to upskill employees and maintain a competitive edge.
- Access information and resources to aid in the effective and efficient implementation of digital technologies to maximize their potential benefits.

For policymakers:

- Provide employers with training, information, and support in navigating the immigration system.
- Deliver timely labour market data to help firms make informed human resource decisions and address labour and skill shortages.
- Identify policies and programs that can best help businesses respond to acute labour shortages and evolving market needs.
- Strengthen credential recognition services for immigrant workers to ensure they are ready to enter the workforce in Atlantic Canada.
- Continue efforts to support the integration and retention of immigrants in a region that has historically faced challenges in doing so.
- While tariffs have subsided, business sentiment remains affected; it is crucial to inspire confidence in small businesses to improve economic resilience.

For settlement agencies:

- Engage with the immigrant community to understand their needs and leverage digital technologies to streamline newcomer settlement.
- Ensure immigrants have access to local job postings and employment resources to support optimal matching of skills and opportunities.
- Foster greater collaboration between settlement agencies as well as other immigration system stakeholders, including policymakers and businesses.

Résumé exécutif

La croissance économique au Canada est demeurée stagnante au cours des dernières décennies, alors que notre pays a pris du retard par rapport aux autres économies avancées en matière de gains de productivité du travail. Malgré la persistance de ce problème, les décideurs demeurent divisés quant aux causes principales et aux meilleures voies à suivre pour bâtir une économie plus résiliente. Parmi eux, un consensus général se dégage toutefois sur le rôle essentiel que doivent jouer les petites et moyennes entreprises (PME) pour combler l'écart de productivité. Les PME représentent la majorité des emplois du secteur privé au Canada (88,2 % en 2021, selon Jiang et Sekkel, 2024), et notre pays compte une proportion nettement plus élevée de PME, et d'emplois au sein de celles-ci, que la plupart des autres économies avancées. Le succès de l'économie canadienne dépend donc largement de celui de nos petites entreprises.

Malgré leur rôle crucial dans l'économie, les petites et moyennes entreprises disposent souvent de ressources limitées comparativement aux grandes organisations. Cette situation complique leur capacité à attirer et à retenir les talents, contribuant ainsi aux pénuries persistantes de main-d'œuvre et de compétences. Ces défis sont particulièrement marqués dans les provinces de l'Atlantique, où la baisse du taux de fécondité, le vieillissement de la population et l'exode continu des jeunes réduisent davantage l'offre de main-d'œuvre. Ces dernières années, les provinces de l'Atlantique se sont de plus en plus appuyées sur l'immigration pour répondre à leurs besoins en ressources humaines. Bien que la plupart des propriétaires et dirigeants d'entreprise reconnaissent l'importance d'investir dans le recrutement et la rétention des personnes immigrantes, plusieurs mentionnent les contraintes financières et le manque de temps comme des obstacles majeurs à ces efforts.

La présente étude s'appuie sur les réponses de 1 700 cadres supérieurs et propriétaires d'entreprise ayant participé à un sondage national. Bien que le sondage couvre l'ensemble du Canada, notre analyse se concentre spécifiquement sur les PME des provinces de l'Atlantique afin de mieux comprendre comment les contraintes de capacité interagissent avec le contexte socioéconomique particulier de la région. Nous examinons comment les défis liés à la main-d'œuvre, façonnés par l'évolution des technologies numériques et les tarifs américains, influencent les besoins en compétences, les pratiques d'embauche ainsi que la capacité et la performance organisationnelles. Par cette analyse, nous visons à fournir des renseignements actuels, fondés sur des données probantes, pour éclairer les politiques publiques et les pratiques d'affaires dans la région.

Résultats clés

Défis liés à l'embauche

- Un peu moins du tiers des entreprises dans les provinces de l'Atlantique (32,8 %) ont connu des difficultés de recrutement au cours des six derniers mois, un taux supérieur à celui observé ailleurs au Canada (27,8 %).
- Les entreprises de grande taille, plus anciennes et appartenant au secteur secondaire étaient les plus susceptibles de signaler des difficultés d'embauche.

- Le Nouveau-Brunswick (35,5 %) affichait le taux le plus élevé de difficultés de recrutement, suivi de l'Île-du-Prince-Édouard (34,6 %), de la Nouvelle-Écosse (33,0 %) et de Terre-Neuve-et-Labrador (27,7 %).
- Parmi les entreprises de l'Atlantique ayant signalé des difficultés d'embauche, la principale raison invoquée était la difficulté à attirer des candidats (38,3 %), un taux nettement supérieur à celui du reste du Canada (31,2 %).
- Les entreprises de l'Île-du-Prince-Édouard (44,8 %) et de la Nouvelle-Écosse (41,0 %) étaient les plus susceptibles d'avoir de la difficulté à attirer des postulants.
- Les entreprises de la région atlantique ont également mentionné le manque de formation, d'expérience et de compétences comme principales causes de contraintes en ressources humaines, à des taux plus élevés que dans le reste du pays.
- Les répondants du Nouveau-Brunswick (39,1 %) et de la Nouvelle-Écosse (37,0 %) étaient les plus nombreux à signaler un manque de compétences parmi les candidats.

Pratiques d'embauche des personnes immigrantes

- Moins de la moitié (45,3 %) des entreprises des provinces de l'Atlantique ont déclaré avoir embauché des personnes immigrantes au cours des trois dernières années, comparativement à 50,8 % ailleurs au Canada.
- Les entreprises comptant des personnes immigrantes dans leur haute direction étaient plus susceptibles d'en embaucher (70,9 %) que celles qui n'en comptaient pas (42,4 %).
- Les entreprises confrontées à des difficultés de recrutement étaient nettement plus susceptibles d'embaucher des personnes immigrantes (54,0 %) que celles n'ayant pas rencontré de tels défis (41,1 %).
- Les entreprises de l'Île-du-Prince-Édouard étaient les plus susceptibles d'avoir embauché des personnes immigrantes (54,0 %), tandis que celles de Terre-Neuve-et-Labrador étaient les moins susceptibles de l'avoir fait (34,9 %).
- Les entreprises de grande taille, plus jeunes et œuvrant dans le secteur des services étaient les plus enclines à embaucher des personnes immigrantes.
- La grande majorité (77,5 %) des répondants de la région atlantique ont déclaré avoir eu une expérience « très positive » ou « positive » avec leurs employés issus de l'immigration, un taux semblable à celui du reste du Canada (78,1 %).
- Les entreprises de Terre-Neuve-et-Labrador figuraient parmi celles les plus susceptibles de rapporter de telles expériences positives (85,7 %), tandis que celles du Nouveau-Brunswick étaient les moins nombreuses à le faire (71,6 %).
- Parmi les répondants ayant indiqué une expérience positive, une forte majorité (67,6 %) a attribué cette réussite à la solide éthique de travail des employés immigrants.

Embauche et rétention futures des personnes immigrantes

- Plus de deux répondants sur trois (69,3 %) ont indiqué être disposés à embaucher des personnes immigrantes à l'avenir, un taux supérieur à celui observé ailleurs au Canada (59,7 %).
- Les répondants de l'Île-du-Prince-Édouard étaient les plus nombreux à exprimer cette volonté (79,1 %), avec peu de variation entre les autres provinces atlantiques.
- Les entreprises de grande taille, plus anciennes et du secteur des services étaient les plus enclines à manifester cette intention.

- Environ une entreprise sur trois (34,9 %) des provinces de l'Atlantique a indiqué que les personnes immigrantes embauchées au cours des trois dernières années travaillaient toujours pour elle. Le taux de rétention était le plus élevé en Nouvelle-Écosse (36,8 %) et le plus faible à l'Île-du-Prince-Édouard (27,3 %).
- Parmi les entreprises n'ayant pas conservé leurs travailleurs immigrants, la plupart ont indiqué que ceux-ci avaient été embauchés par une autre entreprise (25,3 %) ou avaient quitté la province (15,6 %).
- Les travailleurs immigrants étaient plus susceptibles de quitter la province dans les provinces de l'Atlantique (15,4 %) que dans le reste du Canada (7,4 %).

Adoption de l'intelligence artificielle (IA)

- Une entreprise sur quatre dans les provinces de l'Atlantique (24,6 %) a déclaré avoir adopté l'intelligence artificielle (IA), comparativement à 30,4 % dans le reste du Canada.
- L'Île-du-Prince-Édouard affichait le taux d'adoption le plus élevé (34,1 %), suivie de la Nouvelle-Écosse (30,3 %), de Terre-Neuve-et-Labrador (19,4 %) et du Nouveau-Brunswick (18,6 %).
- Les entreprises de grande taille, plus jeunes et axées sur le savoir étaient les plus susceptibles de mettre en œuvre l'IA.
- Les entreprises de l'Atlantique utilisent l'IA dans divers domaines d'activité, notamment le marketing et la publicité (62,1 %), la productivité (55,3 %) et la conception de produits (43,1 %).
- Les entreprises atlantiques étaient plus susceptibles que celles du reste du Canada d'utiliser l'IA dans la gestion des ressources humaines (16,0 % contre 12,9 %), bien que l'adoption demeure faible dans l'ensemble.
- La mise en œuvre de l'IA aurait permis d'améliorer l'efficacité opérationnelle (64,4 %), la personnalisation du marketing et des ventes (59,7 %) ainsi que la productivité organisationnelle (53,7 %).

Besoins en compétences

- La majorité des entreprises n'ont pas précisé leurs besoins futurs en compétences ni les formations souhaitées pour s'adapter à un environnement de travail de plus en plus numérique.
- La compétence la plus souvent mentionnée comme souhaitable était la littératie numérique, bien que les entreprises de l'Atlantique soient moins susceptibles de l'identifier comme prioritaire que celles du reste du Canada (18,7 % contre 21,3 %).
- La plupart des employeurs de la région atlantique ont accordé la priorité à la formation axée sur la conformité, comme les certifications professionnelles (21,4 %), plutôt qu'au perfectionnement ou à la mise à niveau des compétences numériques.

Intelligence artificielle et travailleurs immigrants

- Dans les provinces de l'Atlantique, la proportion d'entreprises embauchant des personnes immigrantes et exprimant la volonté d'en embaucher est très similaire entre les adopteurs de l'IA et les non-adopteurs (45,8 % contre 45,1 %).
- Ailleurs au pays, les entreprises ayant adopté l'IA étaient plus susceptibles d'embaucher des personnes immigrantes que leurs homologues (58,0 % contre 47,7 %) et plus enclines à exprimer cette volonté.

- La majorité des répondants n'avaient pas envisagé le rôle potentiel de l'IA dans la facilitation de l'intégration des nouveaux arrivants parmi ceux ayant répondu à la question (26,3 % sur 54,1 %), tant dans les provinces de l'Atlantique qu'ailleurs au pays.
- Les applications les plus courantes de l'IA en soutien à l'intégration des personnes immigrantes concernaient la formation linguistique (15,2 %), la communication interculturelle (7,2 %) et la formation spécifique à l'emploi (6,4 %).

Impacts des tarifs imposés par l'administration Trump

- La majorité des répondants des provinces de l'Atlantique issus d'entreprises exportatrices prévoyaient des effets négatifs liés aux tarifs américains (67,5 %), un taux comparable à celui observé dans le reste du Canada (65,5 %).
- Les répondants de Terre-Neuve-et-Labrador (81,8 %) étaient de loin les plus susceptibles d'anticiper des répercussions négatives.
- Les impacts les plus souvent anticipés concernaient les revenus (23,3 %), suivis par la hausse des prix des produits et services (18,4 %) et les changements touchant leurs marchés d'exportation (18,0 %).
- Comparativement au reste du Canada, la région de l'Atlantique était plus susceptible d'anticiper des répercussions défavorables sur les revenus, le coût des matières premières et les prix des produits et services.
- Peu d'entreprises prévoyaient des impacts négatifs sur l'emploi (9,3 % contre 2,9 %) ou sur leurs plans d'investissement (4,7 % contre 5,9 %).

Réactions des entreprises face aux tarifs

- La majorité des entreprises des provinces de l'Atlantique ont exprimé leur volonté d'élargir leurs exportations vers de nouveaux marchés internationaux (62,5 %).
- Les répondants ont le plus souvent mentionné l'Union européenne comme marché prometteur (21,9 %), suivie du Royaume-Uni (7,6 %), de l'Australie (4,6 %) et du Japon (4,6 %).
- La majorité des entreprises de l'Atlantique ont également indiqué vouloir accroître leurs exportations sur les marchés canadiens (72,7 %).
- Les marchés intérieurs les plus souvent cités comme prometteurs étaient l'Ontario (41,2 %), le Québec (32,3 %) et l'Île-du-Prince-Édouard (28,8 %).
- À l'extérieur de la région atlantique, les entreprises ont le plus souvent désigné l'Ontario (39,1 %), la Colombie-Britannique (38,1 %) et l'Alberta (34,0 %) comme marchés cibles pour leur expansion.

Implications

Pour les employeurs:

- Miser sur les technologies numériques en gestion des ressources humaines afin de simplifier le recrutement et d'attirer des candidats plus qualifiés, contribuant ainsi à atténuer les difficultés d'embauche.
- Élaborer des stratégies et collaborer avec les organismes d'aide à l'établissement pour tirer parti des bassins de talents internationaux.

- Identifier des moyens d'utiliser les outils numériques pour soutenir l'intégration et la rétention des employés issus de l'immigration, notamment par la formation linguistique, la communication interculturelle et les services multilingues.
- À mesure que l'économie se numérise, évaluer les compétences dont votre entreprise aura besoin à court terme. Envisager des programmes de formation continue afin de perfectionner les employés et de maintenir un avantage concurrentiel.
- Accéder à l'information et aux ressources nécessaires pour favoriser une mise en œuvre efficace et efficiente des technologies numériques, maximisant ainsi leurs retombées positives.

***Pour les décideurs publics*:**

- Offrir aux employeurs de la formation, de l'information et du soutien pour les aider à naviguer dans le système d'immigration.
- Fournir en temps opportun des données sur le marché du travail afin d'aider les entreprises à prendre des décisions éclairées en matière de ressources humaines et à pallier les pénuries de main-d'œuvre et de compétences.
- Identifier les politiques et programmes les plus susceptibles d'aider les entreprises à faire face aux pénuries aiguës de main-d'œuvre et à l'évolution des besoins du marché.
- Renforcer les services de reconnaissance des compétences et des titres de compétence des travailleurs immigrants afin de faciliter leur entrée sur le marché du travail dans les provinces de l'Atlantique.
- Poursuivre les efforts visant à soutenir l'intégration et la rétention des personnes immigrantes dans une région qui a historiquement éprouvé des difficultés en la matière.
- Même si les effets des tarifs se sont atténués, le sentiment des entreprises demeure affecté; il est donc essentiel de renforcer la confiance des petites entreprises pour améliorer la résilience économique.

Pour les organismes d'aide à l'établissement :

- Collaborer avec la communauté immigrante afin de mieux comprendre ses besoins et utiliser les technologies numériques pour faciliter les processus d'établissement des nouveaux arrivants.
- Veiller à ce que les personnes immigrantes aient accès aux offres d'emploi locales et aux ressources en matière d'emploi pour favoriser un meilleur arrimage entre les compétences et les occasions.
- Encourager une collaboration accrue entre les organismes d'aide à l'établissement et les autres acteurs du système d'immigration, y compris les décideurs publics et les entreprises.

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1. Introduction

1.1. Stagnant Economic Growth

Canada has experienced stagnant economic growth over the past few decades, falling behind other advanced economies in labour productivity gains. Despite ongoing concerns about this lagging productivity, there is little consensus among policymakers on its root causes or the most effective path toward a more resilient economy. While Canada makes significant investments in innovation and technological capacity, our country struggles to translate these investments into quantifiable improvements in productivity. This phenomenon has been labelled an "innovation paradox," and untangling this paradox is crucial to finding ways to increase the standard of living for Canadians in the long run.

The productivity challenge in Canada is complex and particularly acute in Atlantic Canada. The region faces a slower projected economic growth rate than the national average, driven in part by significant demographic shifts. Declining fertility rates, an aging population, and a shrinking labour force are placing additional strain on the region's productivity. As more baby boomers retire, the pool of younger workers is not keeping pace with labour market demands (Government of Canada, 2020), thereby intensifying existing capacity constraints and limiting economic growth potential. As a result, all provinces in Atlantic Canada recorded labour productivity growth below the national average by the most recent estimates, with the exception of Nova Scotia (Statistics Canada, 2024).

In recent years, employers across Atlantic Canada have faced growing difficulties in finding and retaining qualified or skilled workers. These challenges are driven not only by demographic shifts but also by the outmigration of younger workers to other provinces in search of better opportunities, contributing to persistent net population losses. Although the region saw record-low unemployment rates prior to the pandemic, unemployment still tends to lag behind national levels (Statistics Canada, 2025). Compared to the rest of the country, all four Atlantic provinces also exhibit wider gaps between job vacancy and unemployment rates, with Newfoundland and Labrador showing the largest discrepancy (Government of Canada, 2020).

1.2. The Role of Immigrants

Immigrants are increasingly important to Canada's economic success, making significant contributions to the country's gross domestic product (GDP) by expanding the workforce, alleviating labour shortages, and stimulating business activity. While immigration helps address immediate gaps in the labour market, immigrants also represent a valuable labour pool that can be re-skilled or upskilled to meet evolving skill demands. As of the latest statistics in 2024, the number of foreign nationals working in Canada has exceeded $5.7 million, corresponding to more than one-quarter of the workforce (Statistics Canada, 2025).

In response to pandemic-induced shortages, the federal government significantly increased immigration levels, driving the country's fastest population growth since 1957. While Canada has historically settled between 200,000 and 300,000 migrants annually over the past few decades, permanent admissions rose to more than 470,000 immigrants in 2023. Simultaneously, eligibility requirements for temporary work programs were relaxed in the post-pandemic period, causing the number of non-permanent residents to surge past $2.8 million. Recently admitted immigrants have been disproportionately concentrated in lower-skilled sectors with persistent vacancy rates, including agriculture, transportation and warehousing, and accommodation and food services (O'Donnell & Skuterud, 2022).

In Atlantic Canada, regional immigration initiatives, such as the Provincial Nominee Program (PNP) and the Atlantic Immigration Program (AIP), have helped attract international talent to provinces that have historically struggled to do so. However, despite these efforts, retention rates remain among the lowest in the country. The latest figures show only 21.6% retention in Prince Edward Island, rising to 57.8% in Nova Scotia, both far below Ontario's 91.4% and Alberta's 88.4% (Statistics Canada, 2024). A key factor behind this trend is the perceived lower quality of available employment: over half of all Atlantic Canadian vacancies are in low-skilled occupations, and temporary and seasonal jobs are more prevalent in the region than in most of Canada (ACOA, 2019). With demographic decline and persistent skill shortages, more than half of businesses in the region also report difficulty finding and retaining qualified workers (ACOA, 2019).

1.3. Contemporary Economic Pressures

Canada's current economic landscape is increasingly precarious, shaped by rapid advancements in digital technology and rising trade tensions with the United States. In this context, supporting the growth of small and medium-sized enterprises is more important than ever. The looming threat of a trade war with the United States, alongside the disruptive impact of artificial intelligence on business operations, has created mounting uncertainty for SMEs. Reducing barriers to immigrant employment is a crucial step towards strengthening Canada's labour market and building long-term economic resilience.

The rapid expansion of the digital economy presents a significant opportunity for capital investment, skill development, and technological advancement, which are key factors in addressing Canada's ongoing productivity challenges. Tackling the country's innovation paradox will require not only increased innovation but also the widespread adoption of new technologies to support sustained economic growth. As the integration of digital technologies in the workplace remains in its early stages, it is vital to understand how businesses perceive and engage with these tools. Drawing on insights from human resource directors and managers, this report examines current and forward-looking perspectives on digital technologies. These early findings provide valuable guidance for shaping economic policy, informing business investment strategies, and supporting workforce development.

In addition, this report explores how Canadian employers are responding to declining business sentiment amid escalating trade tensions with the United States. The two countries have long shared one of the world's most extensive bilateral trade relationships, underpinned by successive free trade agreements. However, the recent imposition of U.S. tariffs on Canadian exports has disrupted cross-border supply chains and created new operational challenges for domestic firms. Understanding how SMEs are adapting to these disruptions is essential for developing policy responses that reinforce Canada's labour market and build long-term economic resilience.

1.4. Objectives

Small and medium-sized enterprises represent the bulk of private sector employment in Canada. Despite their critical role in the economy, SMEs face persistent labour and skill

shortages, limiting their capacity for business growth. While there is widespread recognition among SME owners and executives of the importance of investing in workforce training and employee retention, many do not possess the resources to adequately address these gaps. Labour and skill shortages may adversely impact businesses in several ways, including their cash flow, time allocation, and future planning.

In this study, we draw on first-hand experiences from business owners and executives to better understand specific labour-related challenges facing small and medium-sized enterprises. In particular, we ask:

- Do businesses struggle to fill job vacancies? For what reasons?
- What role do digital technologies play in recruitment strategies?
- Do digital technologies lead to more efficient and effective hiring practices?
- As digital technologies evolve, what skills will be in greater demand?

Immigrant workers offer a profound source of human capital, but small and medium-sized enterprises make limited use of the international talent pool. This is influenced by several factors, including low levels of immigrant recruitment, negative experiences and limited understanding of immigrant-related processes, and insufficient resources to support immigrant integration. To better understand the barriers SMEs face in accessing international talent, we ask:

- To what extent do firms rely on migrant workers to fill job vacancies?
- Do employers plan to make better use of the international talent pool in the future?
- What attitudes do employers hold toward working with immigrant employees?
- Do employers make targeted efforts towards integrating immigrant workers?

In addition, we explore the ways in which contemporary pressures—including the adoption of artificial intelligence and the imposition of U.S. tariffs on Canadian exports—are shaping skill demands, employment practices, and organizational performance and capacity.

Firstly, the adoption of artificial intelligence and other digital technologies is expected to fundamentally transform business operations, enhancing productivity across a wide range of

sectors. As a result, evolving skill needs and shifting labour demand may present new challenges to SMEs and new opportunities to both domestic and foreign workers. To better understand these dynamics, we explore the following questions:

- Which business characteristics are determinants of digital technology adoption?
- What are the reasons for reluctance or unwillingness to adopt digital technologies?
- What are digital technologies used for in the workplace?
- Do digital technologies lead to more efficient and effective business processes?

Secondly, the Canada-U.S. trade war may affect the financial stability of Canadian businesses, with potential downstream effects on their capacity to recruit and retain both domestic and international workers. To better understand how firms are responding to these pressures, we ask:

- Do businesses anticipate negative economic impacts due to tariffs?
- Do businesses plan to change production processes in the face of American tariffs?

2. Methodology

2.1. Survey Data

In this study, we draw on experiences from business owners and executives to understand specific challenges facing Canada's small businesses. Our report uses data from the *National Survey on Skill Demands and Employment Practices,* conducted by Narrative Research on behalf of the Stephen Jarislowsky Chair in Economic and Cultural Transformation in partnership with Future Skills Centre and the Atlantic Canada Opportunities Agency. It marks the third year that the Stephen Jarislowsky Chair in Economic and Cultural Transformation has administered an employer-focused survey, succeeding earlier waves in Atlantic Canada in 2019 and 2022. The validity and reliability of the survey questions were tested during the initial phase, and adjustments were made as necessary.

While continuing to explore core themes from previous years—including immigrant hiring, skill matching and training, and organizational performance—this year's survey also addresses emerging economic issues in Canada. In particular, it places a central focus on digital technology adoption and the impacts of U.S. tariffs on Canadian businesses. Unlike previous waves, the 2025 survey expands to the national level from Atlantic Canada and focuses exclusively on private sector small and medium-sized enterprises (SMEs). Although national in scope, Atlantic Canada was intentionally oversampled to ensure stronger regional representation and generate meaningful insights for the region.

The survey was administered between April 11 and July 23, 2025. A stratified random sampling method was used, where strata were established according to industry, organizational size, and location. This approach is intended to ensure a representative sample, thereby enhancing the generalizability of our findings. Each respondent participated in a 15-minute qualitative, semi-structured telephone interview conducted in either English or French. The target population consisted of employers across Canada with between two and 499 full-time equivalent employees, and the target respondents included owners, managers, senior executives, or human resource directors, depending on the size of the organization.

2.2. Sample Description

In total, 1,700 interviews were conducted, of which 797 were completed in Atlantic Canada (Newfoundland and Labrador, Prince Edward Island, Nova Scotia, and New Brunswick,). Our sample of interest consists of respondents from Atlantic Canada, while those outside the region serve as a comparison group. Respondents were asked to classify their business according to the 2022 North American Industry Classification System (NAICS), and classifications were adjusted accordingly in cases where self-identification was inaccurate. For analytical purposes, twenty NAICS codes were consolidated into eight sectors based on similarities within each category to generate meaningful sample sizes. The construction of the sector variables is outlined in Appendix Table A1.

Below, Table 1 presents the sample distribution across the key variables. Of the sample in Atlantic Canada, 40.2% were micro-businesses (2 to 4 employees), 29.2% were small-sized (5 to 9), 26.7% were medium-sized (10 to 49), and 3.9% were large-sized (49 to 499). In general,

respondent businesses tended to be well-established. Firms that had been operating for more than 30 years comprised the largest share of the sample (35.1%), while those in operation for 10 years or less were the least represented (17.7%). Firms in the service sector, including those in retail trade, food services, and real estate, accounted for the greatest share of the sample (34.7%). Following the service sector, the most represented sectors were the secondary (25.5%), other (12.9%), and technical and professional (9.7%) sectors.

***Table 1**: Respondent Distribution by Employer Region and Key Variables (%)*

	Geographic Region	
	Atlantic Region	**Rest of Canada**
Company Size		
Micro	40.2	42.1
Small	29.2	28.9
Medium	26.7	22.4
Large	3.9	6.5
Operation Years		
1-10 years	17.7	21.3
11-20 years	22.5	28.5
21-30 years	24.7	23.7
30+ years	35.1	26.6
Industry Sector		
Service	34.7	37.4
Natural Resource	5.3	6.5
Secondary	25.5	20.1
Arts & Culture	5.7	5.6
Education & Healthcare	6.3	7.4
Technical & Professional	9.7	12.8
Other	12.9	10.3
Observations	797	903

Among respondents in the Atlantic region, 21.4% primarily operated in Newfoundland and Labrador, 8.2% in Prince Edward Island, 39.1% in Nova Scotia, and 31.3% in New Brunswick. Outside the Atlantic region, the largest shares of respondents operated in Ontario (39.9%) and Quebec (22.1%), followed by British Columbia (17.2%) and Alberta (13.6%). Relatively few firms in this sample operated in Saskatchewan, Manitoba, or the territories.

3. Immigrant Hiring Practices

3.1. Literature Review

Labour shortages during the pandemic. Public health measures implemented to inhibit community transmission of COVID-19 led to a significant decline in economic activity across Canada. Atlantic Canada was particularly hard hit by the economic downturn, losing more than 171,000 jobs in early 2020 (Atlantic Economic Council, 2020). As in the rest of the country, the sectors most affected were those involving high levels of personal contact and deemed non-essential. The region's tourism and accommodation industry contracted by CAD $3.3 billion (a 60% decline) from 2019 to 2020, while restaurants and bars saw an initial 57% drop in sales (Atlantic Provinces Economic Council, 2021). Overall, the Atlantic Provinces Economic Council estimated that regional GDP fell by 10% in March 2020 and a further 11% in April (Atlantic Economic Council, 2020).

After the initial downturn, the Canadian economy gradually recovered, facing occasional setbacks with the emergence of new variants and surges in COVID-19 cases. Mass vaccination efforts began in late 2020, shortly after Health Canada provided emergency authorization of the Pfizer-BioNTech and Moderna vaccines. By early 2022, the vast majority of Canadians had been fully vaccinated, allowing governments to lift lockdown measures, ease travel regulations, and end social distancing and mask mandates. The reduction of public health measures led to businesses reopening, drastically increasing labour demand across Canada. The number of online job postings increased by over 650,000 jobs relative to 2021, corresponding to a 60% year-over-year increase (FSC, 2023a).

Post-pandemic economic recovery. Canada's economy was not well-positioned to accommodate the sudden resurgence in business activity. The pandemic-induced recession had significantly reduced the size of Canada's labour force, leaving firms to compete for a pool of unemployed workers that was 13% smaller than in February 2020 (Fan et al., 2022). Nearly every Canadian industry and sector faced significant labour shortages, with the national job vacancy rate peaking at 6.0% in mid-2022. Across Atlantic Canada, vacancy rates varied notably. Prince Edward Island saw a peak of 8.0%, while the other Atlantic provinces recorded lower-than-average vacancy rates (Statistics Canada, 2025a).

Post-pandemic misalignments between worker and firm expectations likely exacerbated job vacancy rates. According to Statistics Canada (2022a), the average reservation wage—the minimum hourly wage at which job seekers are willing to accept a position—exceeded average offered wages. This gap was particularly pronounced in lower-paying sectors, including retail trade, accommodation and food services, and construction. In some cases, the pandemic also led to heavier workloads, longer working hours, and increased tension with management, contributing to elevated levels of burnout and a greater intent to leave their positions (Orr et al., 2025).

Economic immigration and labour shortages. To address mounting labour shortages, the federal government significantly increased immigration levels for both permanent and temporary entrants. While Canada historically settled between 200,000 and 300,000 migrants annually, permanent admissions rose to more than 470,000 immigrants in 2023. The post-pandemic period also saw a sharp influx of temporary migrants, including holders of study or temporary work permits, asylum seekers, and their families. Most notably, admissions through the Temporary Foreign Worker Program (TFWP) and International Mobility Program (IMP) surged, as the federal government prioritized flexible mechanisms to address evolving labour market demands.

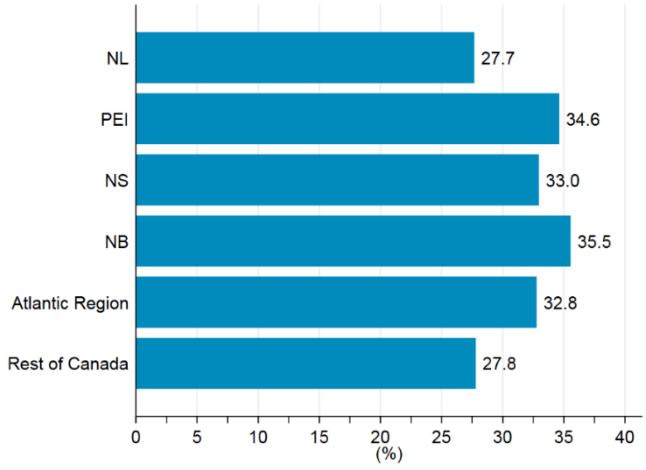
By most recent estimates, the vacancy rate has dropped to 3.1%, returning to levels comparable to those seen before the pandemic. In Atlantic Canada, each province has reported rates that are consistently below that of the national average (Statistics Canada, 2025b). However, while Canada's expansive immigration policy has helped to alleviate acute labour shortages, it is unclear whether immigration has eased the markets from economy-wide labour shortages. Unprecedented population growth has driven up demand for goods and services, increasing overall business activity and, in turn, labour demand. If this growth in labour demand outpaces additional labour supply provided by migrants, then Canada's immigration policy could unintentionally worsen, rather than ease, labour shortages (Fortin, 2025).

3.2. Hiring Challenges

Hiring Challenges. In our survey, 32.8% of respondents in Atlantic Canada reported that their company had experienced hiring challenges in the last six months at the time of the interview. This share was slightly higher than among firms elsewhere in Canada, 27.8% of which reported similar difficulties. While this statistic is somewhat lower than figures reported in recent research on SMEs, our results still underscore the persistent difficulties in attracting and retaining workers. For comparison, the September 2024 *Your Voice Survey* conducted by the Canadian Federation of Independent Business (CFIB) found that 44% of SMEs report experiencing a shortage of skilled labour, cited as a constraint on their ability to increase sales or production (CFIB, 2025).

Hiring Challenges by Province. Respondents in Atlantic Canada were more susceptible to hiring challenges than elsewhere in Canada, but there was notable variation by province. These challenges were especially pronounced in New Brunswick (35.5%), followed by Prince Edward Island (34.6%), Nova Scotia (33.0%), and Newfoundland and Labrador (27.7%). New Brunswick's relatively high rate is somewhat unexpected, given that job vacancies moderated over the past year, labour force growth outpaced the national average, and the province maintained one of the lowest unemployment rates (Province of NB, 2025). However, vacancies were concentrated in manufacturing, aligning with higher reported hiring challenges in the secondary sector (47.4%). By contrast, PEI's elevated rate is less surprising, reflecting its lower unemployment rate, which limits the available applicant pool compared to other Atlantic provinces.

***Figure 1**: Hiring Challenges by Province*



Hiring Challenges by Company Size. As shown in Table 2, organizational size is an important predictor of hiring challenges. Mid-sized (39.0%) and large (43.0%) companies in Atlantic Canada were significantly more likely to report difficulties filling vacancies, compared to only 24.6% of micro-sized firms and 36.9% of small-sized firms. This size gap may reflect the fact that larger firms tend to have more resources and conduct hiring more frequently than smaller firms, increasing exposure to recruitment challenges. Additionally, larger organizations tend to have more complex operational structures and specialized roles, which can impose more stringent qualification requirements on potential candidates.

***Table 2**: Hiring Challenges by Employer Region and Key Variables (%)*

	Geographic Region					
	NL	**PEI**	**NS**	**NB**	**Atlantic**	**ROC**
Company Size						
Micro	23.2	32.1	22.6	26.7	24.6	22.5
Small	25.4	50.0	37.8	41.3	36.9	25.6
Medium	36.4	26.3	44.7	35.9	39.0	38.5
Large	40.0	0.0	33.3	61.5	43.0	34.7
Operation Years						
1-10 years	32.2	29.3	21.2	44.4	29.9	21.1
11-20 years	17.5	57.7	29.8	30.4	29.6	28.6
21-30 years	23.3	22.9	38.3	36.7	33.0	27.6
30+ years	34.9	34.8	42.0	35.4	37.4	33.9
Industry Sector						
Service	22.4	40.5	34.3	30.9	30.9	22.3
Natural Resource	20.3	33.8	36.5	11.1	28.8	30.6
Secondary	45.7	30.6	40.3	47.4	43.1	35.2
Arts & Culture	40.0	65.6	27.3	30.0	32.9	28.4
Education & Healthcare	18.9	50.0	21.7	22.2	22.1	27.1
Technical & Professional	22.4	0.0	14.3	30.0	19.6	22.1
Other	23.9	30.7	39.4	36.6	34.3	38.7

The interaction between company size and province also reveals notable trends. Among micro-sized and small firms, Prince Edward Island reports among the highest rates of hiring difficulties at 32.1% and 50.0%, respectively. On the other hand, respondents from Nova Scotia record the highest rate of challenges among mid-sized firms (44.7%), while large firms in New Brunswick record the highest rate by a significant margin (61.5%).

Hiring Challenges by Company Age. Table 2 also illustrates a clear positive relationship between company age and the likelihood of hiring challenges. Only 29.9% of firms operating for 10 years or less reported difficulties filling vacancies, compared to 37.4% among those in operation for more than 30 years. Older firms in Nova Scotia (42.0%) were especially likely to report challenges, while other Atlantic provinces report similar rates in the mid-30% range. This broader trend suggests that long-established businesses may face heightened recruitment pressures, potentially due to more formalized hiring processes or greater staffing needs. Older firms may also be embedded in more traditional or outdated operational models, impeding their ability to adapt to evolving labour markets.

Hiring Challenges by Sector. Respondents belonging to the secondary sector—including those in construction, manufacturing, and transport—were the most likely to experience hiring challenges, with 43.1% reporting difficulties. The issue was particularly acute in New Brunswick, where 47.4% of secondary sector firms reported human resources constraints. Following the secondary sector, firms in the arts and culture (32.9%) and service (30.9%) sectors reported lower, though still significant, rates of hiring difficulties. A pronounced regional discrepancy emerged between the Atlantic region and elsewhere in Canada. In the rest of Canada, only 35.2% of secondary-sector firms and 22.3% of service-sector firms reported such difficulties, compared to higher rates in Atlantic Canada.

Reasons for Hiring Challenges. Below, Table 3 presents the reported reasons for hiring challenges among respondents, pointing to a shortage of qualified candidates. In Atlantic Canada, the leading reason was difficulty attracting candidates (38.3%), a rate notably higher than in the rest of Canada (31.2%). This challenge was most prevalent in Prince Edward Island (44.8%) and Nova Scotia (41.0%) but equally concerning for Newfoundland and Labrador (36.5%) and New Brunswick (34.8%).

In addition, respondents reported a mismatch between the skills of applicants and the actual requirements of the role, citing lack of skills (36.2%), lack of experience (24.0%), and lack of education (16.3%) as key barriers. New Brunswick (39.1%) and Nova Scotia (37.0%) were more likely to report a lack of skills compared to the rest of the Atlantic region and the rest of Canada. Relatively few businesses report salary expectations (5.6%), delays due to internal processes (1.5%), lack of language skills (2.6%), and declined offers (0.4%) as primary reasons.

***Table 3**: Reasons for Hiring Challenges by Province in Atlantic Canada (%)*

	Geographic Region					
	NL	**PEI**	**NS**	**NB**	**Atlantic**	**ROC**
Too few applicants	36.5	44.8	41.0	34.8	38.3	31.2
Lacked skills	30.8	32.2	37.0	39.1	36.2	33.8
Lacked experience	21.1	12.2	26.0	26.1	24.0	26.7
Lacked education	19.2	15.6	16.0	15.2	16.3	12.1
Declined offer				1.1	0.4	0.8
Salary expectations	7.6		7.0	4.4	5.6	9.7
Internal process delays	1.9		2.0	1.1	1.5	1.7
Lacked language skills	1.9	3.7	2.0	3.3	2.6	2.8

Reasons for Hiring Challenges by Sector. As shown in Figure 2(a), Atlantic Canadian firms in the arts and culture (49.8%) and natural resources (49.3%) sectors were the most likely to cite a shortage of applicants as the primary reason for hiring challenges. In arts and culture, firms in Atlantic Canada may struggle to attract candidates given the larger markets and greater opportunities available in provinces such as Ontario and Quebec. Indeed, outside the Atlantic region, respondents in the arts and culture sector report one of the lowest rates of applicant shortages (19.6%). On the other hand, the high incidence among natural resources firms in Atlantic Canada may reflect regional labour supply constraints, as positions in this sector are often more remote and physically demanding, contributing to a more limited applicant pool.

The service (48.1%) and secondary (34.2%) sectors also reported relatively high rates of applicant shortages, aligning with broader labour market trends. According to the Q2 2022 Canadian Survey on Business Conditions, 49.5% of construction firms and 46.3% of accommodation and food services firms anticipated that recruiting skilled employees would pose a short-run obstacle, compared to just 36.9% of all businesses surveyed (Statistics Canada, 2022). Relative to elsewhere in the country, Atlantic Canadian respondents in the service sector were notably more likely to struggle to attract applicants (48.1% vs. 36.6%). This disparity may reflect Canada's increasing reliance on immigrants to fill shortages in lower-skilled industries such as services and secondary sectors, combined with Atlantic Canada's persistent challenges in attracting and retaining immigrants relative to other major regions.

In contrast, firms in the education and healthcare (25.7%) and the technical and professional sectors (27.3%) were least likely to report applicant shortages. As we saw previously in Table 2, the public service and education sector reported the lowest sectoral incidence of hiring challenges, which is a result consistent with broader labour market indicators. By most recent estimates in June 2025, for example, the job vacancy rate in educational services was only 1.3%, significantly below the national average of 2.9%, suggesting a relatively ample pool of applicants in this sector (Statistics Canada, 2025).

***Figure 2(a)**: 'Too Few Applicants' as a Reason for Hiring Challenges by Sector*

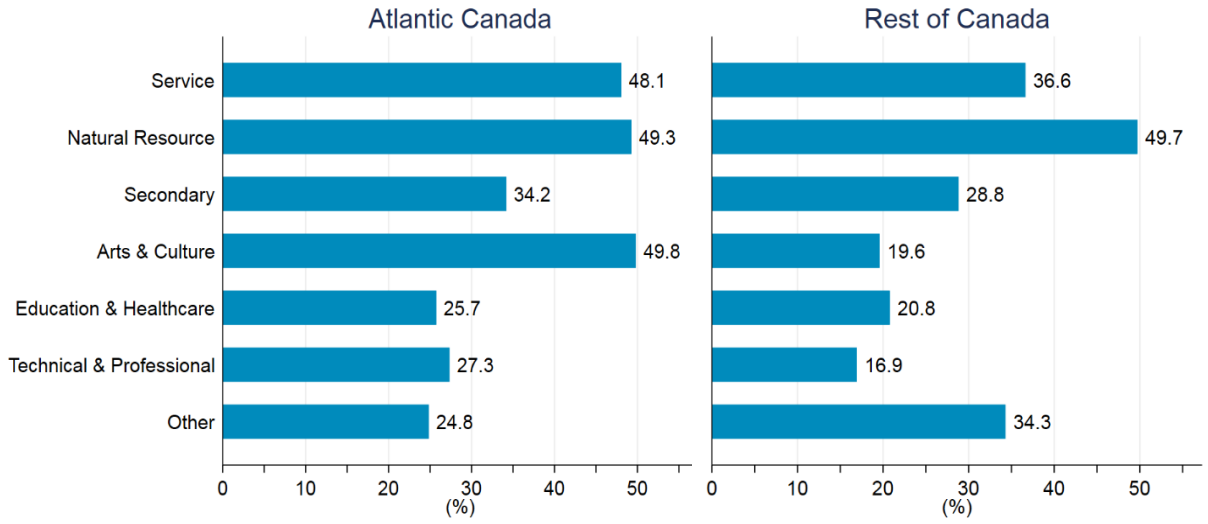
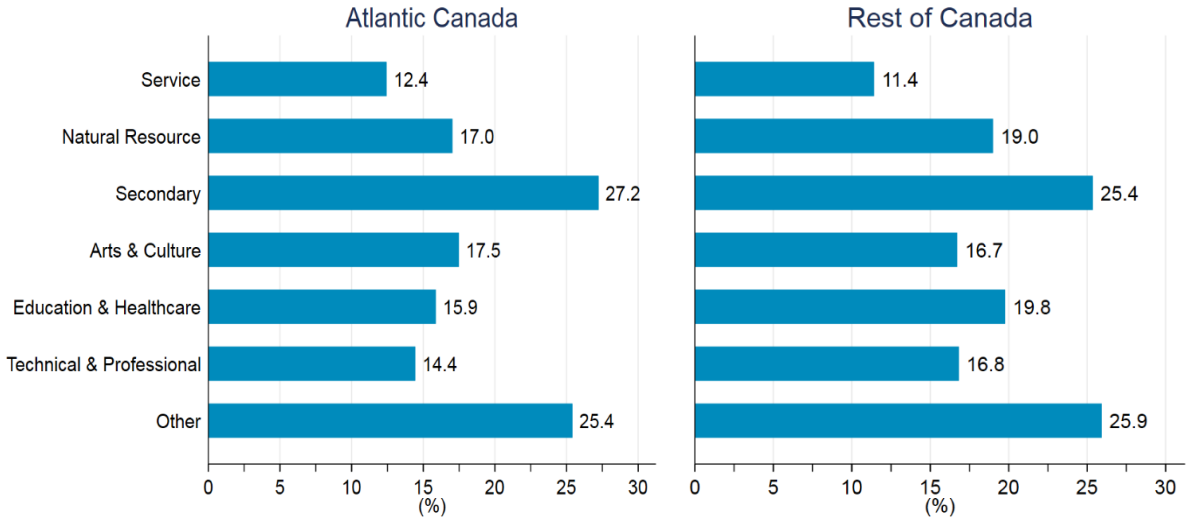


Figure 2(b) presents the relative percentages of respondents citing lack of skills, education, or experience as a primary reason for their hiring challenges. Evidently, there is less variation across sectors in these responses compared to reports of too few applicants. Respondents in the secondary sector reported the highest incidence (27.2%), followed by other (25.4%) and arts and culture (17.5%). The relatively high rates among the secondary sector may reflect that fewer workers in Canada are pursuing apprenticeship certificates in key trade fields, including construction trades, mechanics and repair technologies, and precision production. Evidently, the relative percentages are rather comparable between Atlantic Canada and elsewhere in Canada.

***Figure 2(b)**: 'Lack of Skills,' 'Lack of Education,' or 'Lack of Experience' as a Reason for Hiring Challenges by Sector*



3.3. Immigrant Hiring Practices

Hiring Immigrants. In our survey, international immigrants are defined as individuals who were not born in Canada, including permanent or landed residents, refugees, international students, and temporary foreign workers. As per Table 4, under half of the respondents in Atlantic Canada (45.3%) reported hiring immigrants within the past three years. Interestingly, companies with immigrants in senior management were significantly more likely to hire immigrants (70.9%) than those without immigrant representation at the leadership level (42.4%). This corroborates findings from our previous employer surveys (Fang et al. 2022). Given that recent immigrants often face adverse labour market outcomes, these results suggest that greater immigrant representation in leadership roles may serve as an important mechanism for advancing equity, with positive spillover effects on workplace diversity.

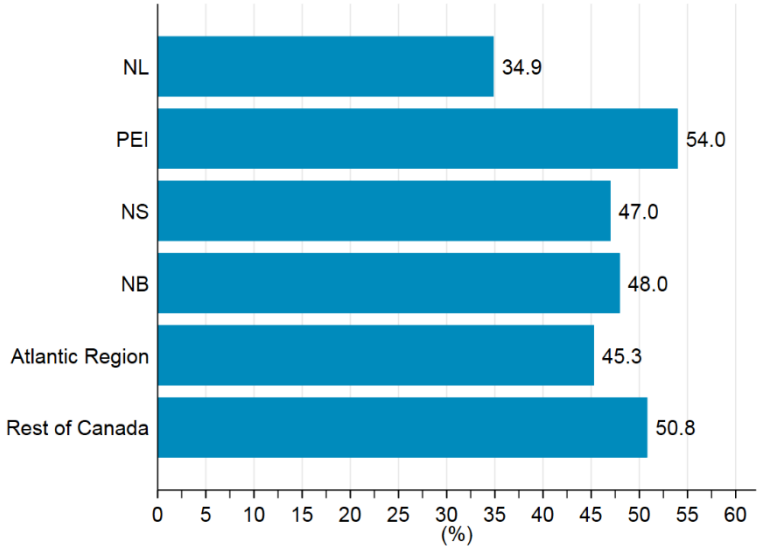
***Table 4**: Hiring Immigrants by Immigrant Senior Management and Hiring Challenges (%)*

	Geographic Region					
	NL	**PEI**	**NS**	**NB**	**Atlantic**	**ROC**
Manager/Executive Immigrant Status						
No	32.8	52.8	45.0	43.5	42.4	45.4
Yes	85.6	66.7	60.8	82.2	70.9	71.8
Hiring Challenges						
No	32.1	48.8	41.8	44.9	41.1	47.7
Yes	42.1	63.7	57.7	53.5	54.0	59.1

Table 4 also highlights differences in immigrant hiring among firms facing recruitment challenges. In Atlantic Canada, firms that reported hiring challenges were more likely to hire immigrants (54.0%) than those that did not (41.1%). A similar pattern appears elsewhere in Canada (59.1% vs. 47.7%). This finding is relatively intuitive, as firms often turn to immigrant hiring to address labour shortages and vacancies. The gap was most pronounced in Nova Scotia, where 57.7% of firms with hiring challenges hired immigrants, compared to just 41.8% of firms without such challenges.

Hiring Immigrants by Province. Although just under half of the firms in Atlantic Canada reported hiring immigrants in the past three years, there were notable differences across provinces. Firms in Prince Edward Island were the most likely to do so, with 54.0% of respondents indicating they had hired immigrants, exceeding the averages for the Atlantic region and rest of Canada. New Brunswick and Nova Scotia followed closely, with 48.0% and 47.0% of firms reporting immigrant hires, respectively. In contrast, firms in Newfoundland and Labrador (34.9%) lagged considerably behind. In the case of Newfoundland and Labrador, this may be impacted by the relatively small proportion of immigrants in the province, compounded by a lack of relevant experience and expertise in hiring and managing newcomer employees.

***Figure 3**: Immigrant Hiring by Geographic Region*



Immigrant Hiring by Company Size. Table 5 presents rates of immigrant hiring across regions and key firm characteristics. Evidently, while over half of all respondents reported

hiring immigrants, the likelihood of doing so increased markedly with company size. Only 28.8% of micro-businesses in Atlantic Canada hired immigrants, compared to 90.5% of large firms. Large firms in Prince Edward Island and New Brunswick were most likely to have hired immigrants, while firms based in Newfoundland and Labrador were least likely to do so. The positive correlation between company size and immigrant hiring may reflect both greater staffing needs and broader recruitment capacity among larger firms. In addition to hiring more personnel overall, large companies may be more likely to engage with international markets and have the resources to access global talent pools.

***Table 5**: Hiring Immigrants by Employer Region and Key Variables (%)*

	Geographic Region					
	NL	**PEI**	**NS**	**NB**	**Atlantic**	**ROC**
Company Size						
Micro	18.8	46.4	27.8	32.2	28.8	34.2
Small	38.1	36.4	44.6	36.0	39.4	48.7
Medium	52.3	78.9	74.1	73.4	70.0	75.8
Large	60.0	100.0	88.9	100.0	90.5	81.8
Operation Years						
1-10 years	32.2	56.0	42.6	52.8	44.0	57.1
11-20 years	45.1	81.0	52.8	45.7	51.5	55.1
21-30 years	21.1	49.2	39.9	50.0	40.1	43.3
30+ years	37.9	41.6	52.5	44.8	45.5	46.1
Industry Sector						
Service	48.7	71.7	56.7	57.4	56.0	56.8
Natural Resource	20.3	32.3	45.5	44.4	40.8	56.9
Secondary	22.9	53.6	43.3	47.4	42.5	49.5
Arts & Culture	30.0	100.0	27.2	20.0	30.5	41.5
Education & Healthcare	43.8	0.0	43.1	50.0	44.3	50.5
Technical & Professional	22.4	48.8	51.6	45.0	43.3	42.1
Other	14.3	30.0	32.2	41.5	32.3	44.0

Immigrant Hiring by Company Age. For respondents outside of the Atlantic region, immigrant hiring shows a modest negative association with the number of years of operation. Firms operating for 1 to 10 years (57.1%) were more likely to hire immigrants than those with over 30 years (46.1%) of operation. However, this pattern does not hold in Atlantic Canada. In fact, among Atlantic firms, those operating for over 30 years were the second most likely to hire immigrants (45.5%), only slightly behind firms operating for 11 to 20 years

(51.5%). This suggests that younger firms in Atlantic Canada may face more barriers to immigrant hiring compared to their counterparts elsewhere in the country.

Immigrant Hiring by Sector. Across all sectors, firms outside Atlantic Canada were more likely to hire immigrants than their Atlantic counterparts. Within Atlantic Canada, respondents belonging to the service sector, including those in retail, food services, and real estate, were most likely to hire immigrants (56.0%). This may reflect the sector's relatively high demand for low-skilled labour, which is often met through Canada's temporary foreign worker programs. Notably, occupations such as cooks, food counter attendants, and food service supervisors were among the fastest-growing categories for positive Labour Market Impact Assessments (Duhatschek, 2024). Following the service sector, the education and healthcare (44.3%), technical and professional (43.3%), and secondary (42.5%) sectors reported the highest immigrant hiring rates.

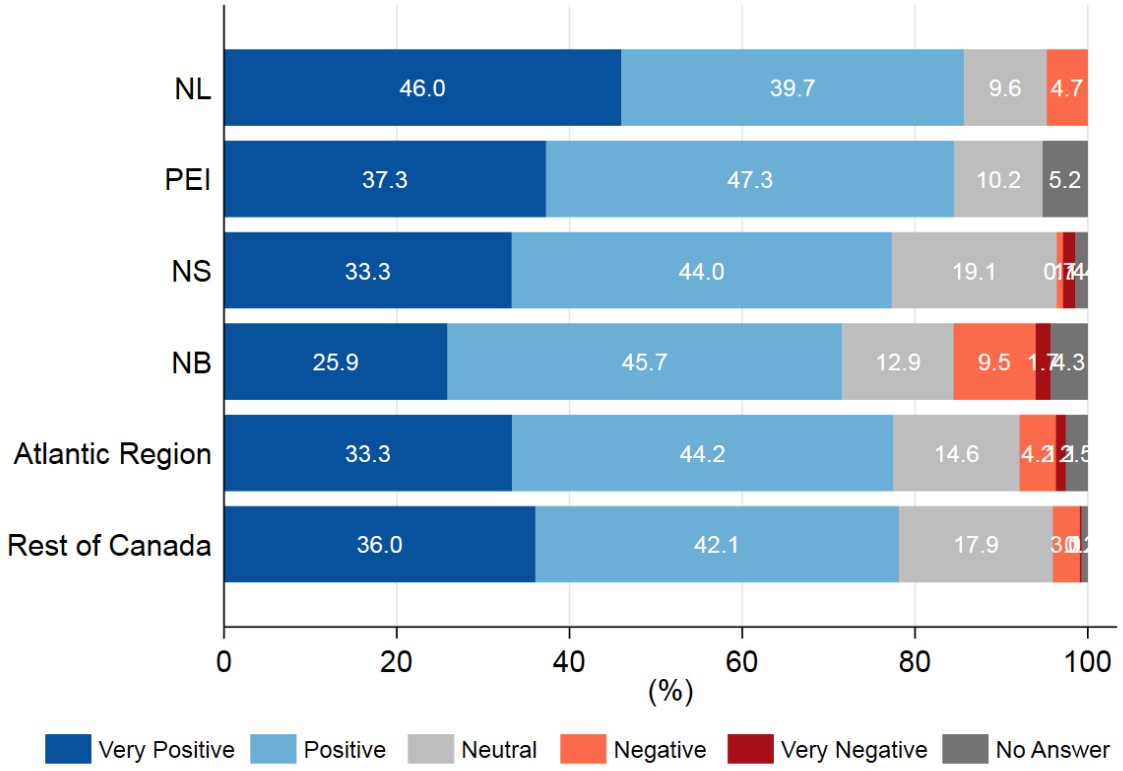
Perceptions of Immigrant Workers. Among firms that hired immigrants, the vast majority reported positive experiences (77.5%). Specifically, 33.3% of Atlantic Canadian respondents described their experience as 'very positive', while another 44.2% reported 'positive' experiences. Positive perceptions were nearly identical inside and outside of Atlantic Canada (77.5% vs. 78.1%). These statistics are largely consistent with previous research. In our 2020 survey, for example, 87% of employers in Atlantic Canada expressed satisfaction with their experiences with immigrant workers (Fang et al., 2021). However, there have been some shifts in attitudes since this survey. Namely, the prevalence of positive experiences appears to have declined by roughly 10 percentage points.

Among employers who did not report positive experiences, most described their experiences as neither positive nor negative. Specifically, 14.6% of respondents who hired immigrants indicated a neutral experience. Negative experiences were rare within this group, with only 4.2% reporting a 'negative' experience and just 1.1% reporting a 'very negative' one. These results suggest that while not all Atlantic Canadian employers had strongly positive encounters, genuinely poor experiences with immigrant workers remain relatively uncommon.

Perceptions of Immigrant Workers by Province. Figure 4 presents the relative percentages of respondents in Atlantic Canada reporting their perceptions of immigrant workers. There is little variation in perceptions across provinces. Respondents in Newfoundland and Labrador were the most likely to report 'very positive' and 'positive' experiences (85.7%), followed closely by those in Prince Edward Island (84.6%). This aligns with our survey results and prior research, which found that PEI exhibited the most favourable attitudes toward hiring immigrants (Fang et al., 2020).

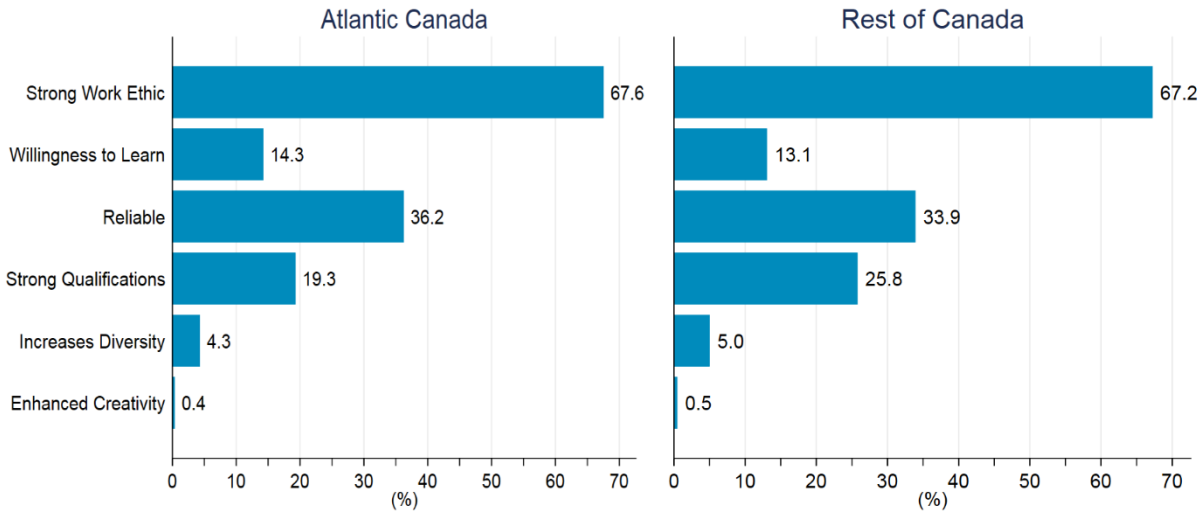
Satisfaction levels in Nova Scotia and New Brunswick were similarly high, with approximately 77.3% and 71.6% of respondents reporting positive experiences, respectively. Relatively few respondents across the region reported 'negative' or 'very negative' experiences; however, those in New Brunswick were the most likely to do so by a sizeable margin (11.2%), followed by respondents in Newfoundland and Labrador (4.7%) and Nova Scotia (2.1%). Interestingly, no respondents from Prince Edward Island reported negative perceptions of immigrant workers.

***Figure 4**: Perceptions of Immigrant Workers by Geographic Region*



Reasons for Positive Experiences with Immigrant Workers by Region. Figure 5 presents the reasons cited by firms for their positive experiences with immigrant workers. Firms inside and outside the Atlantic region cite strong work ethic as the most common reason, with 67.6% and 67.2% of each sample citing this respectively. Firms in Atlantic Canada were somewhat more likely to emphasize reliability (36.2%) and willingness to learn (14.3%) as key contributors to their satisfaction, compared to firms elsewhere. Conversely, they were less likely to highlight immigrants' strong qualifications (19.3%) or the benefits of increased diversity (4.3%). The share of firms identifying enhanced workplace creativity as the primary benefit was similar across both groups.

***Figure** 5: Reasons for Positive Experiences with Immigrant Workers by Geographic Region*



3.4. Future Immigrant Hiring and Retention

Willingness to Hire Immigrants. More than two in three (69.3%) Atlantic Canadian respondents indicated that their companies were willing to hire immigrants in the future. As shown in Table 6, companies with immigrants in senior management were about equally likely to express willingness to hire additional immigrants in the future compared to companies without immigrants in senior management (66.9% vs. 69.5%). When considered alongside the results from Table 4, this suggests that, although immigrant representation at senior levels is positively associated with past hiring of immigrants, it does not necessarily translate into a greater willingness to hire immigrants going forward. One possible explanation is that social capital and networking play a central role in immigrant

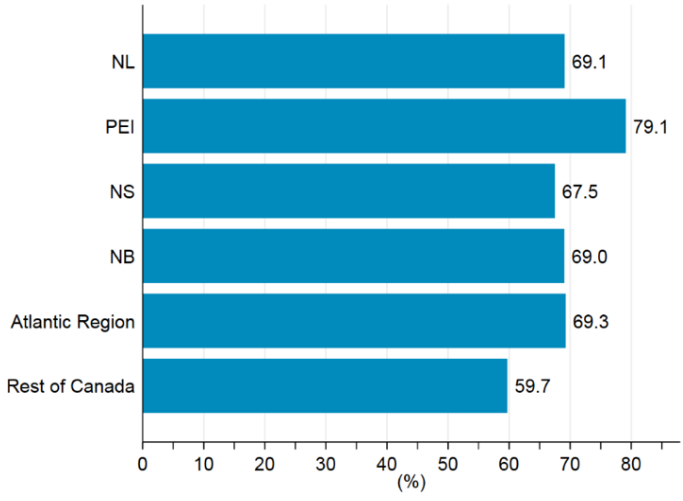
employment. For example, research indicates that immigrant managers are more likely to hire immigrants of similar backgrounds (e.g., Nicodemo & Nicolini, 2011). Despite this, future willingness to hire may be driven more by economic considerations than by social ones, as managers weigh their firms' broader labour needs and prevailing market conditions.

***Table 6**: Willing to Hire Immigrants by Immigrant Senior Management and Hiring Challenges (%)*

	Geographic Region					
	NL	**PEI**	**NS**	**NB**	**Atlantic**	**ROC**
Manager/Executive Immigrant Status						
No	68.4	80.3	69.2	67.8	69.5	59.7
Yes	85.6	66.7	55.3	78.6	66.9	59.8
Hiring Challenges						
No	68.0	78.8	64.9	68.6	67.8	56.1
Yes	72.0	79.6	72.7	69.8	72.2	69.0

Willingness to Hire Immigrants by Province. Respondents across Atlantic Canada expressed a relatively stronger willingness to hire immigrants compared to elsewhere in the country (69.3% vs. 59.7%). Prince Edward Island stood out by a sizable margin, with 79.1% of respondents indicating future willingness to hire. This relatively high level of openness may reflect the fact that PEI firms were also among the most likely to report positive experiences with immigrant workers among the Atlantic provinces. Following Prince Edward Island, willingness was highest in Newfoundland and Labrador (69.1%), followed by New Brunswick (69.0%), and Nova Scotia (67.5%).

Figure 6: Willingness to Hire Immigrants by Province in Atlantic Canada



Willingness to Hire Immigrants by Company Size. As shown in Table 7, there is a positive correlation between company size and willingness to hire immigrants in the future. While 62.7% of micro-businesses and 69.5% of small businesses in Atlantic Canada expressed willingness, a significantly higher proportion of mid-sized (77.2%) and large firms (80.4%) indicated that they are open to hiring immigrants in the future. This pattern likely reflects differences in labour demand across firm sizes. Larger firms, which tend to operate on a broader scale and face more persistent workforce needs, are more likely to recruit both domestic and international talent.

Table 7*: Willingness to Hire Immigrants by Geographic Region and Key Variables (%)*

	Geographic Region					
	NL	**PEI**	**NS**	**NB**	**Atlantic**	**ROC**
Company Size						
Micro	63.8	75.0	61.7	60.0	62.7	55.5
Small	73.0	72.7	70.3	65.3	69.5	54.5
Medium	72.7	89.5	72.9	82.8	77.2	69.1
Large	60.0	100.0	77.8	84.6	80.4	77.8
Operation Years						
1-10 years	67.8	72.0	60.7	63.9	63.4	62.2
11-20 years	57.6	93.5	75.8	63.1	69.9	57.3
21-30 years	76.7	81.8	66.1	73.3	72.3	55.2
30+ years	71.2	68.5	69.8	70.9	70.4	63.3
Industry Sector						
Service	71.1	75.8	68.5	67.6	69.6	60.9
Natural Resource	80.1	100.0	68.2	66.7	73.3	54.4
Secondary	62.9	79.4	68.1	73.7	70.4	60.9
Arts & Culture	69.8	100.0	72.8	60.0	70.9	60.7
Education & Healthcare	75.0	50.0	64.5	55.6	63.8	51.3
Technical & Professional	72.3	74.4	62.9	80.0	70.0	60.2
Other	61.9	76.4	64.3	65.9	65.9	61.4

Among all business sizes, firms in Prince Edward Island reported the highest or second-highest willingness to hire immigrants. This is particularly notable given that these same firms were also among the most likely to have hired immigrants in recent years (Table 5). Together, these findings suggest that the province is especially reliant on immigrant workers to address labour shortages and are likely to remain so in the coming years.

Willingness to Hire Immigrants by Company Age. In general, there was a weak positive correlation between company age and willingness to hire immigrants. While 63.4% of firms aged 1 to 10 years expressed willingness in Atlantic Canada, this share rises among firms aged 30 years to 70.4%. Interestingly, the highest willingness was reported by firms aged 21 to 30 years (72.3%), despite these firms being among the least likely to have hired immigrants in the past. If company age is treated as a proxy for growth, these results suggest that openness to hiring immigrants may be less about a firm's growth stage and more influenced by other factors, such as evolving workforce needs or broader labour market conditions.

Willingness to Hire Immigrants by Sector. Willingness to hire immigrants appears relatively consistent across sectors. Firms in the natural resources sector reported the highest willingness (73.3%), followed closely by those in the arts and culture (70.9%) and secondary (70.4%) sectors. Within the natural resources sector, willingness to hire immigrants was especially pronounced in Prince Edward Island and Newfoundland and Labrador, where 100.0% and 80.1% of respondents expressed such intent, respectively.

Immigrant Outcomes. Respondents were asked whether any immigrants hired by their company in the past three years were no longer with the organization. If they answered yes, they were then asked to identify the reasons for the departure. Interestingly, the most common response for Atlantic Canadian respondents was that the immigrant workers were still employed at the company (34.9%). The retention rate was similar, but slightly greater, for the sample outside of the Atlantic region (36.8%). Among respondents who indicated that immigrant employees had left, the most frequently cited reason was that the individual had been hired by a different company (25.2%). Other reasons included leaving the province (15.4%), which was reported at a much lower rate elsewhere in Canada (7.4%).

Firms in Atlantic Canada reported relatively similar immigrant retention rates across provinces. The highest retention rate was observed in Nova Scotia (36.8%), while the lowest rate was observed in Prince Edward Island (27.3%). Compared to the rest of Canada, all Atlantic provinces reported higher rates of immigrants leaving the province, ranging from 27.6% in PEI to 12.7% in Newfoundland and Labrador. Immigrant workers in PEI were also more likely to have left the country after employment (9.7%), highlighting potential challenges in long-term retention or greater reliance on temporary workers. New Brunswick

stood out for reporting the highest rates of immigrant hires leaving for experiencing performance issues (12.1%), among the Atlantic provinces.

***Table 8**: Immigrant Outcomes by Geographic Region (%)*

	Geographic Region					
	NL	**PEI**	**NS**	**NB**	**Atlantic**	**ROC**
New Company	27.0	29.9	28.4	19.0	25.2	26.9
Left Province	12.7	27.6	14.2	14.7	15.4	7.4
Performance Issues	7.9	4.8	12.0	12.1	10.7	6.7
Left Country	3.2	9.7	5.7	4.3	5.2	5.3
Visa Expired	3.2	2.4	3.6	6.0	4.2	8.5
Still at Company	31.8	27.3	36.8	36.2	34.9	36.7

Immigrant-Centred Supports. Among Atlantic Canadian firms that hired immigrants within the past three years, very few (10.5%) reported making changes to workplace practices to better support the integration of international hires. Nonetheless, the prevalence of these immigrant-centred supports was slightly higher in Atlantic Canada than in the rest of Canada (10.5% vs. 9.5%). Among Atlantic firms that did implement supports, the most common were language training (3.8%), cross-cultural training (2.5%), multilingual services (1.4%), and legal or visa-related assistance (1.4%). However, relatively few respondents, if any, reported offering other forms of support, such as mentorship opportunities, networking programs, or facilitating access to government resources. This suggests that long-term integration strategies remain largely underutilized, and expanding such initiatives could be particularly useful for the economic, social, and cultural integration of immigrants.

4. Digital Economy, Skill Needs, and Immigrant Workers

4.1. Literature Review

Immigration, Economic Growth, and the Digital Economy. In the post-pandemic period, Canada's immigration policy has kept the economy afloat, but economists have criticized this approach as short-sighted (for e.g., see Doyle et al., 2024). Policymakers often face a trade-off between addressing short-run labour market needs and pursuing long-run economic growth. A large-scale expansion of the workforce in lower-skilled sectors may relieve immediate hiring pressures, but it is unlikely to improve labour productivity and

promote sustainable economic growth. If the goal of immigration policy is to achieve a higher rate of economic growth, Canada should prioritize raising average human capital through the entry of high-skill workers (Borjas, 2019).

An immigration policy prioritizing the entry of high-skill workers can raise economic growth in two ways. Firstly, high-skill immigrants tend to make a positive net fiscal contribution. On average, Canadian immigrants pay two thousand dollars more in taxes than they receive in government benefits, amounting to billions in public revenue each year (Kapsalis, 2021). Secondly, high-skill immigrants are more likely to possess specialized skills, making important contributions to entrepreneurial activity, innovation, and, ultimately, productivity growth. Relative to native-born Canadians, business ownership and self-employment rates are higher among immigrants, and immigrant-owned firms are more likely to implement a product or process innovation (Ostrovsky & Picot, 2020; Picot & Ostrovsky, 2021).

In the context of digital transformation, the alignment between immigration and technological investment is increasingly important. As businesses adopt new digital tools, there will be a surge in demand for specialized technical skills, including competency in data analysis and machine learning, content creation and digital marketing, and software and web development. The future of Canada's economic competitiveness is contingent not only on the adoption of new technologies but also on the availability of personnel to implement, manage, and work alongside them. This year, employment in the digital economy is projected to surpass $2.2 million, and integrating high-skill immigrants in the workforce will be essential to meet labour demand (ICTC, 2024).

Increasing demand for digital skills. For 75% of Canadians, the pandemic intensified engagement in internet-related activities, including video conferencing, streaming content, and purchasing goods and services through e-commerce platforms. While digital technologies were increasingly important for leisure activities, many Canadians also found ways to be productive online. Relative to the pre-pandemic period, 31% of Canadians were more likely to participate in online training, and 7% were more likely to use the internet to earn income (Bilodeau et al., 2021). Canadian skill leaders underscore the importance of foundational digital literacy, such as using a computer, navigating communication software, and sending e-mails, as critical for success in a digital world (FSC, 2023). Due to increased digital

engagement, many Canadians likely strengthened these foundational skills throughout the pandemic.

Since the onset of the pandemic, the demand for advanced digital skills has increased significantly. As Canadian companies expand their repertoire of digital technologies, there are concerns about whether the labour supply can keep up with the demand for digital skills. According to an employer survey conducted by IBM (2023), 21% of respondents indicated that they do not have employees with adequate skill sets to use AI tools they plan to integrate, and 17% of respondents cannot find new employees to fill skill gaps. While businesses are increasing their usage of AI, the benefits of innovation will be negligible if there are insufficient personnel to apply these technologies. As such, this growing mismatch in physical and human capital underlines the need for targeted re-skilling and up-skilling initiatives.

Implications for recent immigrant workers. Concerns about the widespread replacement of human labour by automation have long accompanied technological change. In general, innovative technologies create efficiencies in production processes, reducing the demand for workers to perform routine tasks. In the latter half of the 20th century, robots were introduced in manufacturing industries, assisting in welding, painting, assembly, disassembly, and several other procedural and consistent applications. The adoption of industrial robots led to significant productivity gains, subsequently driving down levels of labour-intensive employment (Acemoglu & Restrepo, 2020). Similarly, in the early 21st century, advancements in automation software enabled the processing of large volumes of data with greater speed and accuracy. This effectively rendered many data-entry roles obsolete.

The increasingly digital economy is expected to bring significant disruptions to the labour market, particularly for less-educated and lower-skilled workers who face the greatest risk of automation. Recent immigrants may be disproportionately affected, as they are overrepresented in lower-skilled sectors with high vacancy rates, such as agriculture, transportation and warehousing, and accommodation and food services. According to their estimations, Mehdi & Frenette (2024) find that about one in ten Canadian jobs are highly exposed to and highly complementary with AI. This proportion will likely rise in the short

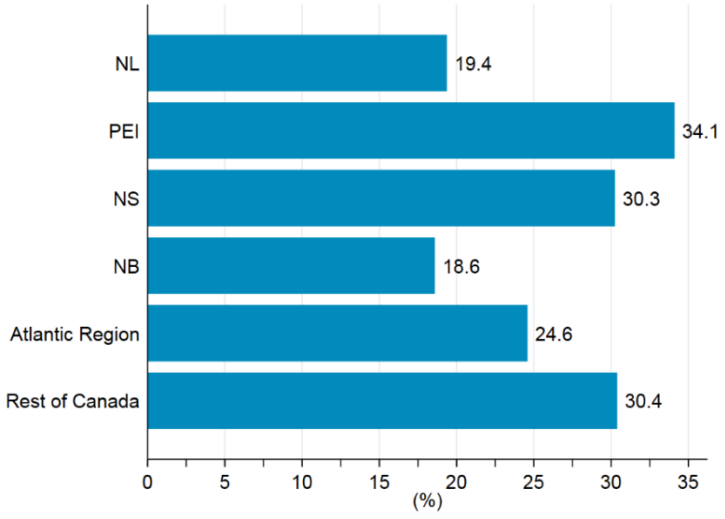
run, as Canadian workers increasingly report self-directed usage of AI for the purpose of both routine and non-routine tasks (KPMG, 2024).

4.2. Artificial Intelligence Adoption

Artificial Intelligence Adoption. In Atlantic Canada, about one in four firms (24.6%) reported using artificial intelligence (AI) in some capacity. Adoption was higher elsewhere in the country, with 30.4% of firms reporting AI use, particularly in professional markets such as those in Ontario. These figures are substantially higher than the 12.2% adoption rate reported in the second quarter results of the Canadian Survey on Business Conditions, which measured AI use specifically in producing goods and services (Bryan et al., 2025). This discrepancy may arise from broader definitions of AI use in our survey.

Artificial Intelligence Adoption by Province. There was notable variation in artificial intelligence (AI) adoption across the Atlantic provinces. Perhaps surprisingly, firms in Prince Edward Island were the most likely to have adopted AI in some capacity (34.1%), narrowly surpassing the rate in Nova Scotia (30.3%). This may be partly explained by the fact that PEI firms also reported the highest levels of hiring challenges and applicant shortages—conditions that may prompt firms to adopt AI as a strategy to maintain productivity amid human resource constraints. In contrast, adoption rates in Newfoundland and Labrador (19.4%) and New Brunswick (18.6%) were lower, falling below the overall regional average.

Figure 7*: Artificial Intelligence Adoption by Geographic Region*



Artificial Intelligence Adoption by Company Size. As shown in Table 9, AI adoption appears to be weakly positively correlated with company size. While only 25.4% of micro-businesses reported adopting AI, this figure reaches 34.7% among large companies in Atlantic Canada. Prince Edward Island recorded the highest adoption rates across all company sizes, while Newfoundland and Labrador and New Brunswick tended to lag behind. This trend may reflect the greater financial and human resources available to larger firms, as well as a stronger capacity to invest in and integrate emerging technologies into their operations.

***Table 9**: Artificial Intelligence Adoption by Employer Region and Key Variables (%)*

	Geographic Region					
	NL	**PEI**	**NS**	**NB**	**Atlantic**	**ROC**
Company Size						
Micro	18.8	32.1	30.1	21.1	25.4	30.8
Small	14.3	31.8	25.7	13.3	19.2	24.8
Medium	27.3	31.6	34.1	18.8	27.8	34.1
Large	20.0	75.0	33.3	30.8	34.7	40.3
Operation Years						
1-10 years	28.6	29.3	42.4	30.6	36.0	44.2
11-20 years	17.5	56.5	25.7	15.2	23.6	30.2
21-30 years	21.0	31.4	25.1	21.7	23.8	28.2
30+ years	16.7	22.9	31.4	14.6	21.3	23.1
Industry Sector						
Service	19.8	19.7	27.8	16.2	22.1	23.6
Natural Resource	39.9	15.4	36.3	11.1	28.5	26.1
Secondary	17.2	45.0	26.5	11.9	20.9	32.5
Arts & Culture	50.2	100.0	50.0	20.0	46.2	41.8
Education & Healthcare	12.5	50.0	42.8	50.0	36.6	35.2
Technical & Professional	22.1	76.7	40.1	45.0	39.2	45.4
Other	4.8	23.6	10.7	9.8	10.7	25.2

Artificial Intelligence Adoption by Company Age. In general, younger firms are significantly more likely to adopt AI compared to their older counterparts. More than one in three (36.0%) of businesses aged 1 to 10 years reported adopting AI, likely reflecting a greater need to leverage emerging technologies for competitive advantage during the early stages of business development. Nova Scotia stands out in this regard, with 42.4% of businesses under 10 years of age reporting AI adoption—substantially higher than other firms in the region.

On the other hand, only 23.8% of firms aged 21 to 30 years reported AI adoption, and the rate was even lower (21.3%) among firms older than 30 years. This gap by company age may reflect structural barriers faced by older firms, which often have more traditional and rigid operational frameworks.

Artificial Intelligence Adoption by Sector. As expected, knowledge-based sectors report the highest rates of AI adoption, while lower-skill traditional sectors tend to lag behind. In Atlantic Canada, firms in arts and culture were most likely to adopt AI (46.2%), while outside the region firms in the technical and professional sector were most likely to do so (45.4%). In contrast, adoption rates were considerably lower in sectors such as secondary (20.9%) and service (22.1%) sectors, where AI may have fewer immediate applications. In many of these cases, limited digital skills among workers may further hinder uptake, even where AI could provide practical benefits.

Artificial Intelligence Adoption across Business Areas. While Atlantic Canada and the rest of Canada show similar patterns in the ranking of AI adoption across business areas, firms in Atlantic Canada appear more likely to apply AI for product and service promotion. As shown in Figure 8, marketing and advertising were the most common areas of AI use in Atlantic Canada (62.1%), while marketing and advertising lagged behind other areas elsewhere in Canada (52.5%). In addition, 40.5% of businesses in Atlantic Canada reported using AI for market research and 43.1% for product design, compared to 34.2% and 38.6%, respectively, in the rest of Canada. While the rest of Canada fell behind Atlantic Canada in AI adoption for product and service promotion, it dominates the region in the adoption of productivity AI tools (58.4% vs. 55.3%).

The least common areas of AI adoption were sustainability (4.1%), operations (14.3%), and human resource management (HRM) (16.0%). Notably, firms in Atlantic Canada were more likely to report adopting AI in HRM compared to those elsewhere in the country (16.0% vs. 12.9%). This trend may reflect the higher rates of hiring challenges reported in the region, which could drive businesses to rely on digital tools to expand their hiring scope and improve efficiency. HRM tools provide several advantages, including cost savings, greater efficiency, wider candidate reach, improved filtering, and a reduced risk of unconscious bias. Firms that rely solely on traditional hiring practices may unintentionally limit their access to a broader and more diverse talent pool.

***Figure 8 (a)**: Artificial Intelligence Adoption Decisions in Business Areas among Adopters in Atlantic Canada (%)*

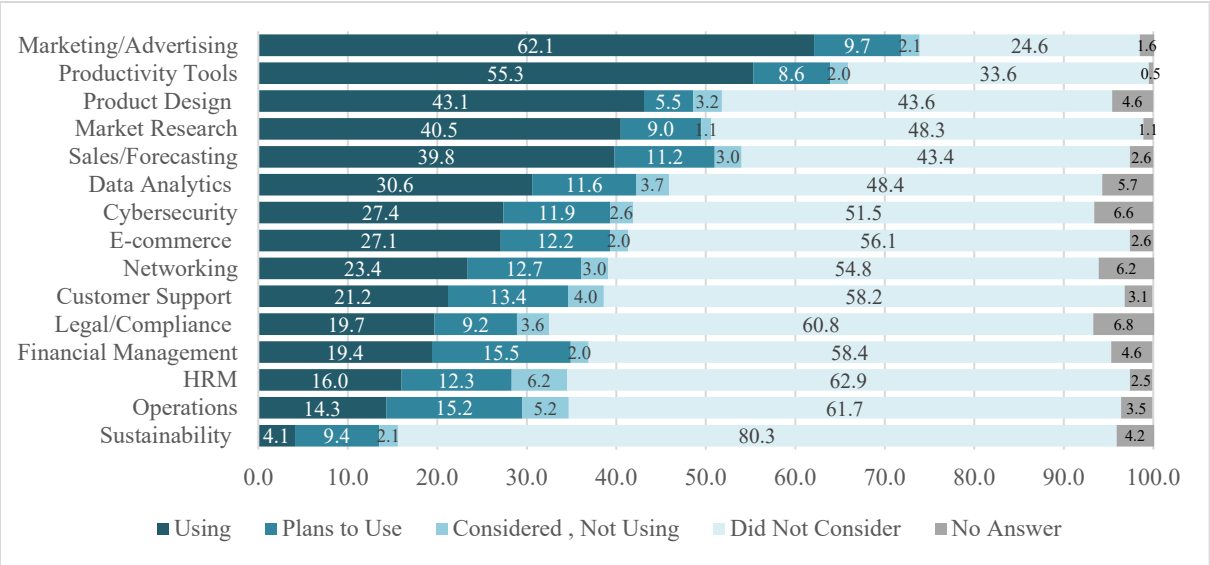
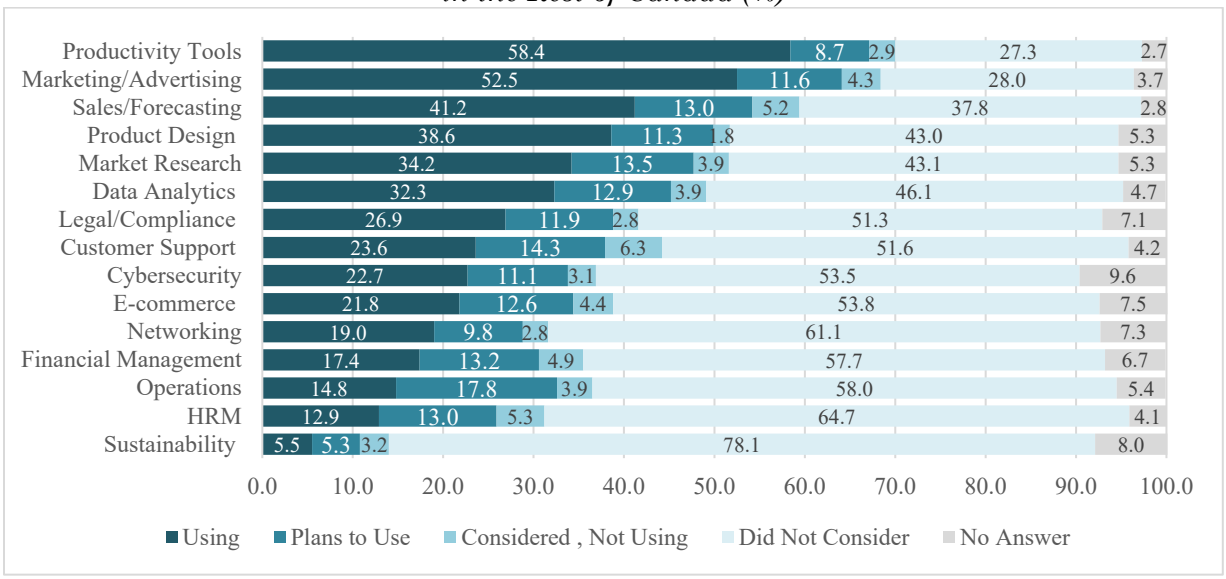


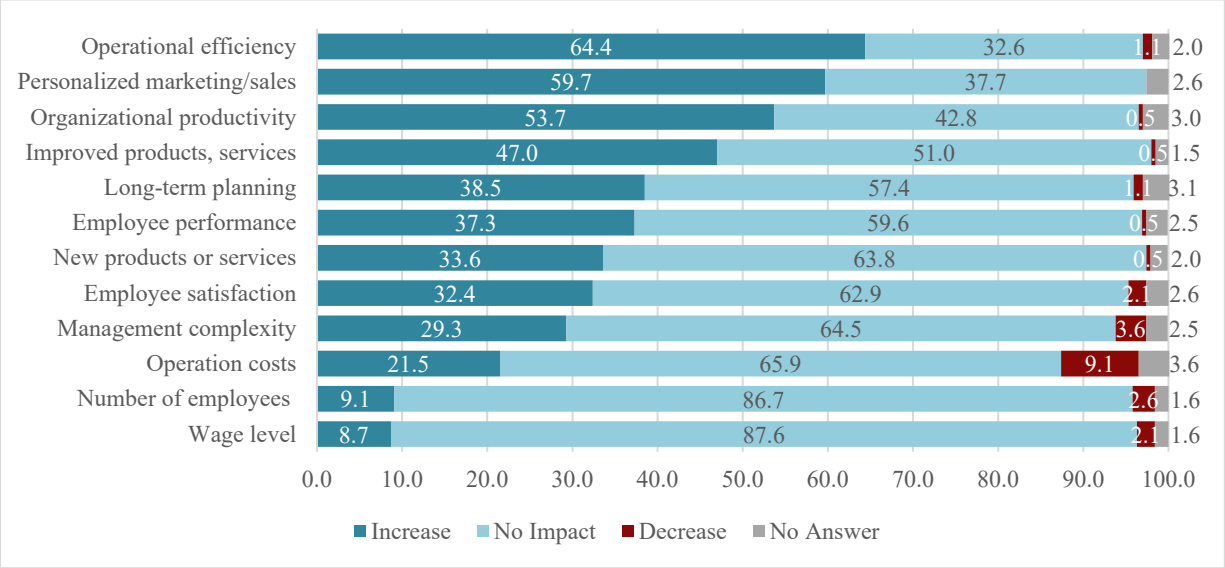
***Figure 8 (b)**: Artificial Intelligence Adoption Decisions in Business Areas among Adopters in the Rest of Canada (%)*



A sizeable proportion of respondents indicated that their firm plans to expand AI usage across additional business areas. Notably, many of these intentions target areas with currently low adoption rates, suggesting that firms may be attempting to catch up. For example, while only 14.3% of respondents in Atlantic Canada reported using AI in operations, it was the most frequently cited area for future adoption. Other commonly mentioned areas for expansion included financial management, customer support, and human resource management.

Organizational performance and artificial Intelligence Adoption. Among firms that had adopted AI, respondents were asked to describe its impact on business performance across key areas. In Atlantic Canada, the most commonly reported outcomes were increased operational efficiency (64.4%), improved personalized marketing and sales (59.7%), organizational productivity (53.7%), and products and services (47.0%). By contrast, relatively few firms indicated changes in human resources: 86.7% and 87.6% of Atlantic respondents reported no impact on employment levels or wages, respectively. This is an important result, as it suggests that most AI adopters do not necessarily view the technology as a substitute for workers.

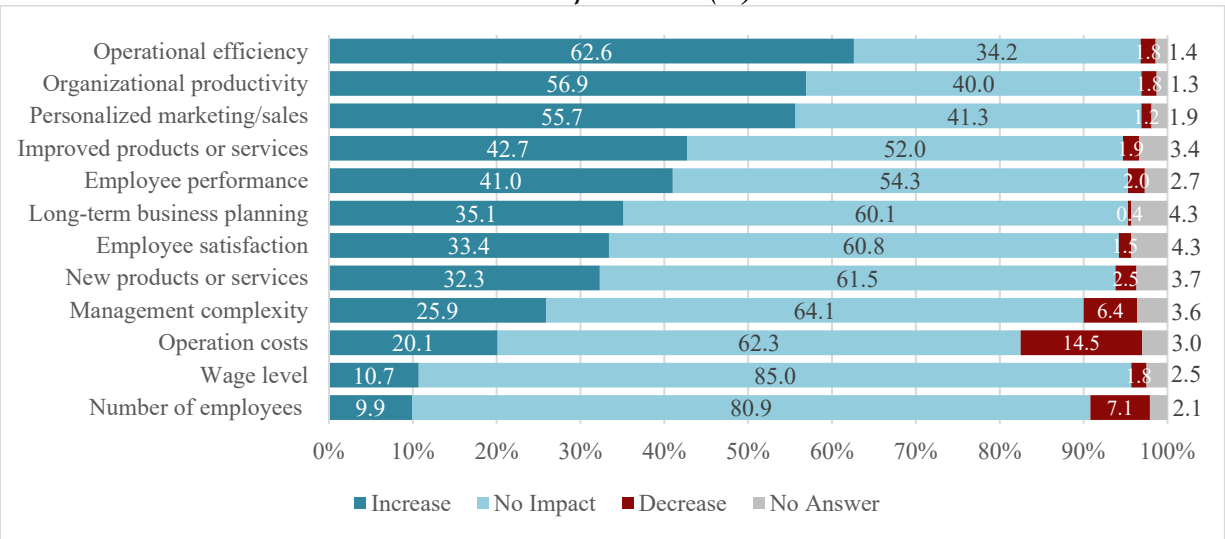
Figure 9a*: Impact of Artificial Intelligence across Business Areas among Adopters Atlantic Canada (%)*



Results regarding operational costs were more mixed. While the majority reported no change, 21.5% indicated that AI had increased costs, whereas 9.1% said it had reduced them.

The perceived benefits of artificial intelligence adoption were broadly similar between Atlantic Canada and the rest of Canada. Notably, firms in the Atlantic region were more likely to highlight benefits in long-term planning and personalized marketing and sales, while firms elsewhere in Canada were slightly more likely to report gains in organizational productivity and employee performance. Interestingly, respondents elsewhere in Canada were more like to have reported decreased costs associated with AI adoption relative to their Atlantic Canadian counterparts.

***Figure 9b**: Impact of Artificial Intelligence across Business Areas among Adopters Rest of Canada (%)*

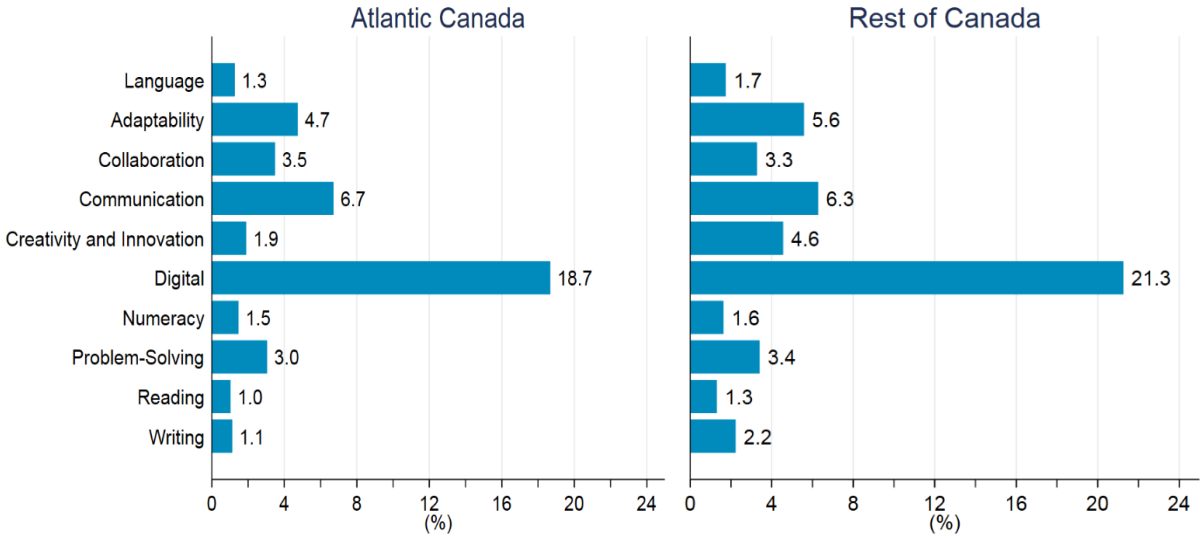


4.3. Skill Needs

Desired Skills in Employees. Respondents were asked to identify new skills they would like their employees to possess in light of ongoing advancements in digital technologies and artificial intelligence. A large share of businesses did not provide a specific answer, suggesting that many remain uncertain about the competencies needed in a digital workplace. As shown in Figure 10, the most cited skill was digital literacy, with the Atlantic Canada slightly less likely than the rest of Canada to cite this (18.7% vs. 21.3%). This was followed by communication skills (6.7%) and adaptability (4.7%). A smaller proportion of businesses in Atlantic Canada highlighted the importance of collaboration (3.5%) and problem-solving (3.0%) skills. Overall, these findings suggest that although some employers recognize the need for evolving skill sets, many are still unclear about which specific capabilities needed for a digital work environment.

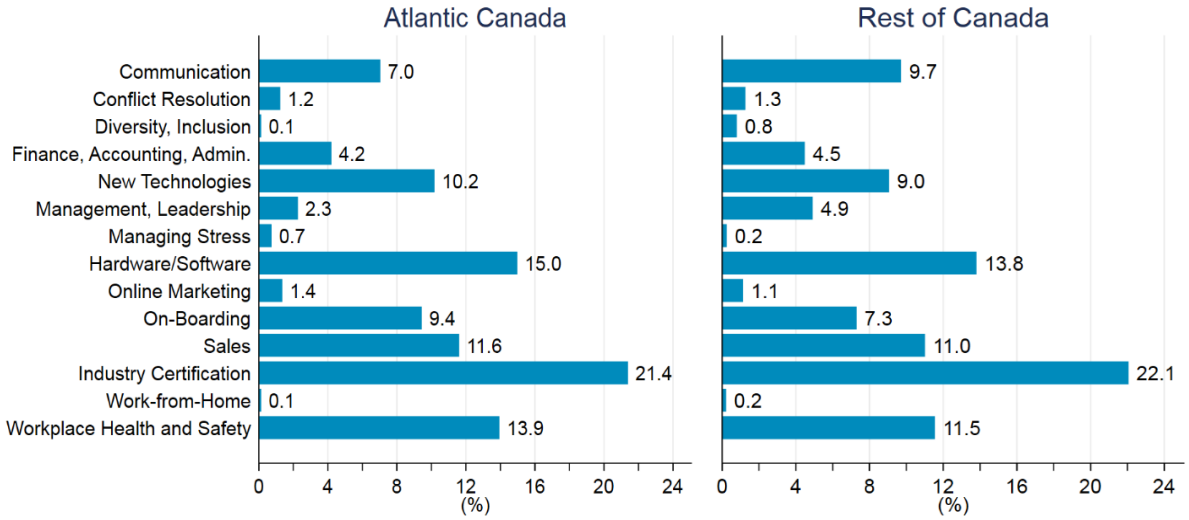
Desired Training for Employees. Respondents were also asked to identify new training courses they would like their employees to receive. As with the question on desired skills, most respondents were unable to name specific training programs, indicating a general uncertainty or lack of immediate training priorities. As shown in Figure 11, among those who did provide a response in Atlantic Canada, the most mentioned areas were industry certification (21.4%), specific hardware or software (15.0%), and workplace health and safety (13.9%). Fewer respondents listed sales training (11.6%), new technologies (10.2%), and

***Figure 10**: Desired Future Skills in Employees*



onboarding (9.4%). These responses suggest that while a small subset of employers is focused certification (21.4%), specific hardware or software (15.0%), and workplace health and safety (13.9%). Fewer respondents listed sales training (11.6%), new technologies (10.2%), and onboarding (9.4%). These responses suggest that while a small subset of employers is focused on technical upskilling, most continue to prioritize compliance-oriented training areas such as industry certification and workplace health and safety.

***Figure 11**: Desired Future Training for Employees*



Overall, the ranking of desired training areas in Atlantic Canada closely resembled that of rest of Canada sample. One notable distinction was a greater emphasis on workplace health and safety, reported by 13.9% of respondents, approximately two percentage points higher than the rest of Canada sample. Following workplace health and safety, firms in the rest of Canada firms most commonly highlighted the need for training in industry certification (22.1%), hardware or software (13.8%), and communication (9.7%), with rates largely consistent with Atlantic Canadian firms. Additionally, firms in the region were slightly more likely to express interest in training related to sales (11.6%), but slightly lower in finance, accounting, and administration (4.2%).

4.4. Implications for Immigrant Workers

Artificial Intelligence Adoption and Immigrant Hiring. As previously mentioned, recent immigrants tend to be concentrated in low-skill industries, such as agriculture, accommodation and food services, and transportation and warehousing. A significant concern in contemporary times is that companies may seek to replace workers, especially those in low-skilled positions, with digital technologies. Below, Table 10 presents the rates of immigrant hiring and willingness to hire immigrants by geographic region and AI adoption.

Table 10*: Hiring Immigrants and Willingness to Hire Immigrants by Geographic Region and AI Adoption*

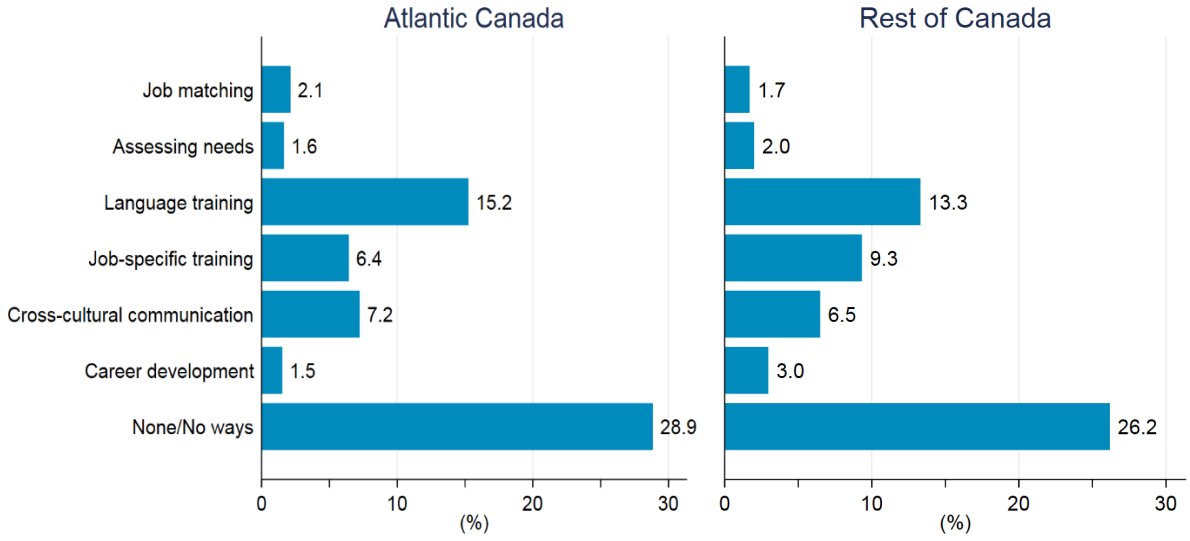
	Geographic Region	
	Atlantic	**ROC**
Outcome A: Hired Immigrants (%)		
AI Adoption		
No	45.1	47.7
Yes	45.8	58.0
Outcome B: Willingness to Hire Immigrants (%)		
AI Adoption		
No	68.7	57.3
Yes	71.0	65.2

In Atlantic Canada, the share of firms hiring immigrants is nearly identical between AI adopters and non-adopters (45.8% vs. 45.1%). By contrast, elsewhere in the country, AI adopters are significantly more likely than non-adopters to have hired immigrants (58.0% vs. 47.7%). While this is a notable finding, it is difficult to establish a causal relationship between

AI adoption and immigrant hiring. One explanation is that immigrant workers, who may bring higher levels of technical skills and education, may be more complementary to digital technologies, explaining the higher hiring rates among AI adopters across Canada. In Atlantic Canada, however, firms may face difficulties in attracting and retaining international talent, limiting this complementarity. Indeed, firms in the region expressed equally strong willingness to hire immigrants regardless of AI adoption status, yet lower overall immigrant hiring rates suggest that businesses may be relying on technology to fill persistent labor gaps.

Artificial Intelligence and Integration of Immigrant Employees. Finally, respondents were asked to identify ways in which artificial intelligence (AI) could support the integration and retention of employees who are new to the country. The majority did not provide a specific response, suggesting that many employers had not yet considered AI as a tool for this purpose. In fact, as shown in Figure 12, among those employers who responded (54.1%, 54.2% for ROC), the most common response in Atlantic Canada was that AI could not support integration at all (28.9%, 26.2% for ROC). Among those who did see potential, the most frequently mentioned applications included language training (15.2%), cross-cultural communication (7.2%), and job-specific training (6.4%). A smaller share of respondents pointed to the use of AI for job matching (2.1%), assessing newcomer needs (1.6%), and career development (1.5%).

***Figure 12**: Artificial Intelligence as a Support for Immigrant Integration and Retention*



The responses were broadly similar between Atlantic Canada and the rest of Canada. Firms in the Atlantic region were more likely to indicate that AI could not support integration (28.9% vs. 26.2%), yet they were also more inclined to see potential applications in language training (15.2% vs. 13.3%) and cross-cultural communication (7.2% vs. 6.5%). By contrast, respondents elsewhere in Canada were more likely to highlight the use of AI for job-specific training of immigrant workers.

5. Trade War, Labour Market, and Immigrant Workers

5.1. Literature Review

Canada-U.S. Relations. Historically, the United States and Canada have enjoyed a mutually beneficial relationship, sharing extensive borders, defence and national security partnerships, and trade agreements. The U.S. and Canada have maintained free trade agreements since 1988, culminating in one of the largest bilateral trade relationships in the world. In 2024, Canada's total goods trade with the United States was an estimated USD $762.1 billion, making the U.S. Canada's most important partner for international trade (USTR, 2025). Canada is the top export market for the United States by a large margin, and 34 states sell more goods to Canada than to any other country (Ercolao & Foran, 2025). Given the respect and interdependence between our two nations, the announcement of President Trump's tariff regime was unfortunate news for many.

Timeline of President Trump's tariffs. On his first day in office, Trump laid the groundwork for a trade war with Canada, promising a 25% tariff on all goods and services. In the subsequent months, Trump would double down on his promises, delay the implementation of the tariffs, and repeatedly hint at their reintroduction and expansion. While tariffs on Canadian exports were eventually enacted, there remains significant uncertainty regarding the nature and longevity of Trump's tariffs at the time of writing this report. The precarity of the situation is exacerbated by widespread misinformation, inconsistent messaging from the White House, and confusion surrounding Trump's policy intentions towards Canada.

On February 1, 2025, Trump declared an emergency over illegal immigration and drug trafficking, allowing him to sign an executive order to impose 25% tariffs on Canada. The tariffs were paused for a month soon after, as former Prime Minister Justin Trudeau took steps to alleviate Trump's concerns about border security. Discontent with the efforts made by Canada, Trump followed through with the tariffs on March 4th. Trump placed a 25% tariff on all Canadian imports, excluding energy, which was limited to 10%. In the following days, he postponed tariffs on USMCA-compliant goods, covering a substantial proportion of imports from Canada. In response, Trudeau announced retaliatory tariffs on USD $ 21 billion worth of American imports (Grantham-Philips, 2025).

On March 12th, Trump followed up with a fresh wave of 25% tariffs on Canadian steel and aluminum. Trudeau's successor, Prime Minister Mark Carney, would continue his tit-for-tat strategy, imposing tariffs on an additional USD $20 billion worth of American goods. The reciprocal tariffs targeted U.S. steel products, aluminum products, and various additional goods, including tools, computers, and display monitors. Most recently, the United States imposed a 25% tariff on Canadian automobiles on April 9th. Again, Canada responded with strong counter-tariffs on non-USMCA-compliant automobiles (Government of Canada, 2025).

The long-run effects of tariffs. Using macroeconomic theory, the Bank of Canada (2025) paints a simple, illustrative tariff scenario, highlighting potential impacts on key economic indicators. In the long run, American tariffs may lead to a permanent decline in GDP due to the erosion of business expectations and household demand: (1) American tariffs increase the price of Canadian imports; (2) Canada's retaliatory tariffs increase the price of American imports; (3) Canada's retaliatory tariffs make domestic investment more expensive; (4) Canadian businesses adversely impacted by tariffs will decrease production and employment levels; and (5) declines in net exports, investment, and demand cause aggregate output to decrease in the short run.

Implications for Immigrant Workers. As we have seen, the ongoing trade war poses risks to the Canadian economy, threatening the financial stability of both firms and workers. In the second quarter of 2025, real GDP declined by 1.6% on an annualized basis, reflecting weaker business sentiment and heightened uncertainty following the imposition of U.S.

tariffs (Lord, 2025). Although economists have not yet sounded alarms about an impending recession, the trade war may exert lasting pressures on the economy. Historically, immigrants have been disproportionately affected during downturns, experiencing higher unemployment rates and lower employment probabilities than native-born Canadians. Recessions can also leave "scarring" effects, as periods of unemployment or underemployment hinder the long-run economic integration of immigrants (Hou & Picot, 2022).

5.2. Impacts of the Trade War

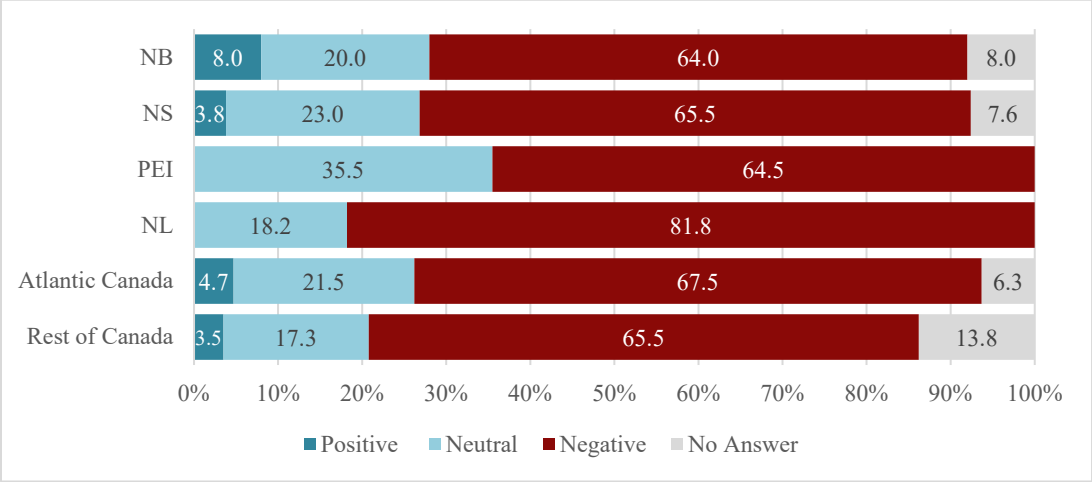
Exporting Firms. In total, 8.2% of respondents operating in Atlantic Canada reported exporting goods and services to other countries, slightly lower than the proportion of exporters outside of the Atlantic Region (10.9%). Firms in New Brunswick were the most likely to engage in exporting, with 10.3% of respondents in the province indicating export activity. This was followed by Nova Scotia (8.6%) and Newfoundland and Labrador (6.1%). Respondents in Prince Edward Island were the least likely to export (4.0%), which may reflect the province's consistently low national ranking in total export value. It is important to note that the number of exporting firms is relatively small; therefore, province-level findings in this section should be interpreted with caution and may not necessarily be generalizable.

Magnitude of Impacts of U.S. Tariffs. The majority of Atlantic Canadian respondents from exporting firms (67.5%) anticipated negative impacts from U.S. tariffs, representing about 5.5% of the total regional sample. A similar share was observed in the rest of Canada, where 65.5% of respondents expressed the same concerns. While the high proportion of anticipated impacts may raise concerns about the resiliency of these economies, the figure is notably lower than estimates from other sources. For instance, data from the second quarter of the *Canadian Survey on Business Conditions* found that nearly one-fifth of all businesses expected tariffs to have a high impact on their operations (Sood, 2025).

As per Figure 13**,** respondents in Newfoundland and Labrador were the most likely to anticipate negative impacts from U.S. tariffs (81.8%), a sizeable margin above the other provinces. By contrast, respondents in Prince Edward Island, Nova Scotia, and New Brunswick reported relatively similar rates, all in the mid-60% range. Across the Atlantic

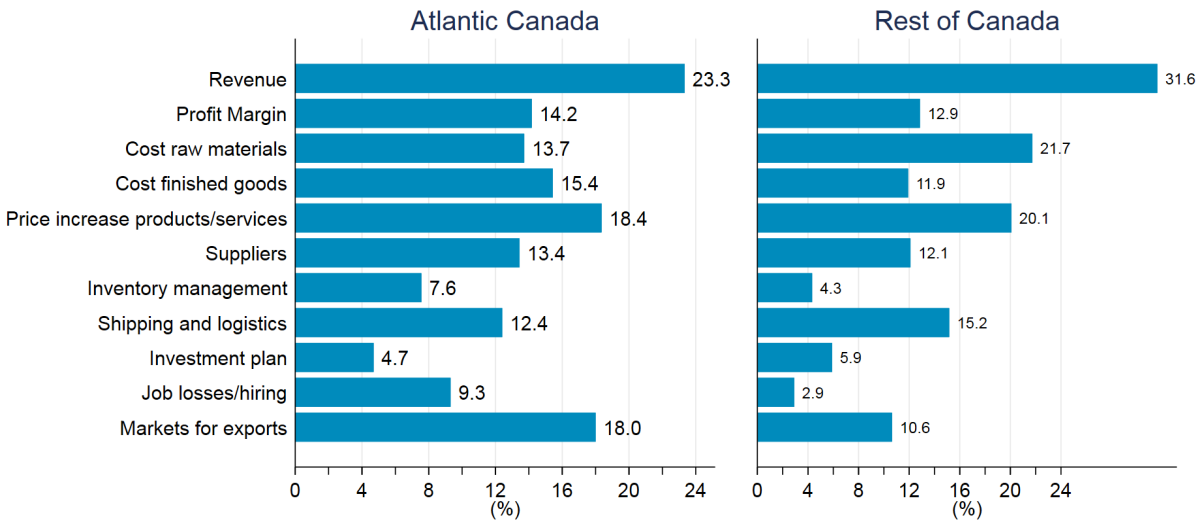
region as a whole, 21.6% of exporting firms indicated that they expected no economic consequences from the trade war, suggesting a somewhat greater buffer compared to firms elsewhere in Canada. Within the region, firms in PEI were the most likely to expect no impacts (35.5%), while firms in Newfoundland and Labrador were the least likely (18.2%).

***Figure 13**: Impacts of U.S. Tariffs by Geographic Region among Exporting Firms*



Negative Impacts of U.S. Tariffs. Among exporting firms, those anticipating negative effects from U.S. tariffs most commonly expect impacts on revenue (23.3%), followed by price increases in their products and services (18.4%), changes to their market for exports (18.0%), and increases in the cost of finished goods (15.4%). These findings suggest that most businesses foresee short-term disruptions resulting from American protectionist trade measures. In contrast, relatively few anticipate long-term structural changes. For example, only 9.3% anticipate job losses or reductions in hiring, and 4.7% indicate that tariffs will alter their investment plans.

***Figure 14**: Anticipated Negative Impacts of U.S. Tariffs among Exporting Firms*



According to Figure 14, relative to firms in Atlantic Canada, those operating elsewhere in the country were more likely to anticipate decreases in revenue (31.6%), increases in the cost of raw materials (21.7%), and increases in the price of products and services (20.1%). In contrast, firms in Atlantic Canada were notably more likely to feel pressured to seek new export markets (18.0% vs. 10.6%) and more likely to anticipate impacts on employment, including job losses and reduced hiring (9.3% vs. 2.9%). This is particularly concerning for a region that has historically faced challenges in attracting and retaining top talent.

Implications for Immigrant Workers. Although exporting firms in Atlantic Canada were more likely to anticipate negative employment impacts from the Canada-U.S. trade war, there is no clear evidence that this would hinder immigrant hiring. In fact, among respondents who anticipated negative economic impacts of the tariffs, 86.3% of Atlantic Canadian firms reported that they would be willing to hire immigrants over the next three years, compared to 68.9% of exporting firms elsewhere in Canada. While this willingness may not necessarily translate into actual hiring, the result is nevertheless encouraging for immigrant labour market prospects in the region.

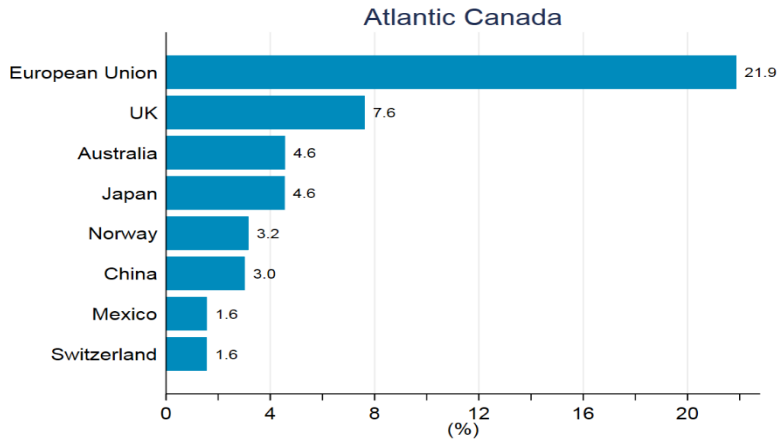
5.3. Recovering from the Trade War

Opportunities for New International Trading Partners. While Canada and the United States maintain one of the world's largest bilateral trade relationships, Canada's continued

economic reliance on the U.S. reflects a longstanding failure to diversify its international trade partners. Prime Minister Mark Carney and the federal government have taken active steps to broaden Canada's global economic presence, including the pursuit of new trade agreements with the United Kingdom (U.K.), the European Union (E.U.), and the South American trade bloc Mercosur. Diversifying Canada's trade portfolio could help buffer the economy against the adverse effects of recent U.S. protectionist policies. Reflecting this shift, the majority of surveyed exporting firms from Atlantic Canada expressed a willingness to expand exports to international markets outside of the United States (62.5%).

Figure 15 presents the percentage of firms that identified specific countries and geographic regions as offering the greatest opportunities for export expansion. By a sizable margin, respondents cited the European Union as the most promising market to increase their trade (21.9%). This likely reflects the existing legal framework established under the Comprehensive Economic and Trade Agreement (CETA), which has the potential to facilitate greater trade between Canada and the European Union. Experts have argued that Canada and the E.U. should pursue full ratification of the agreement to maximize its benefits and strengthen economic ties in key sectors of mutual interest (Viju-Miljusevic, 2025).

***Figure 15**: Willingness to Increase Trade with International Partners among Exporting Firms in Atlantic Canada*



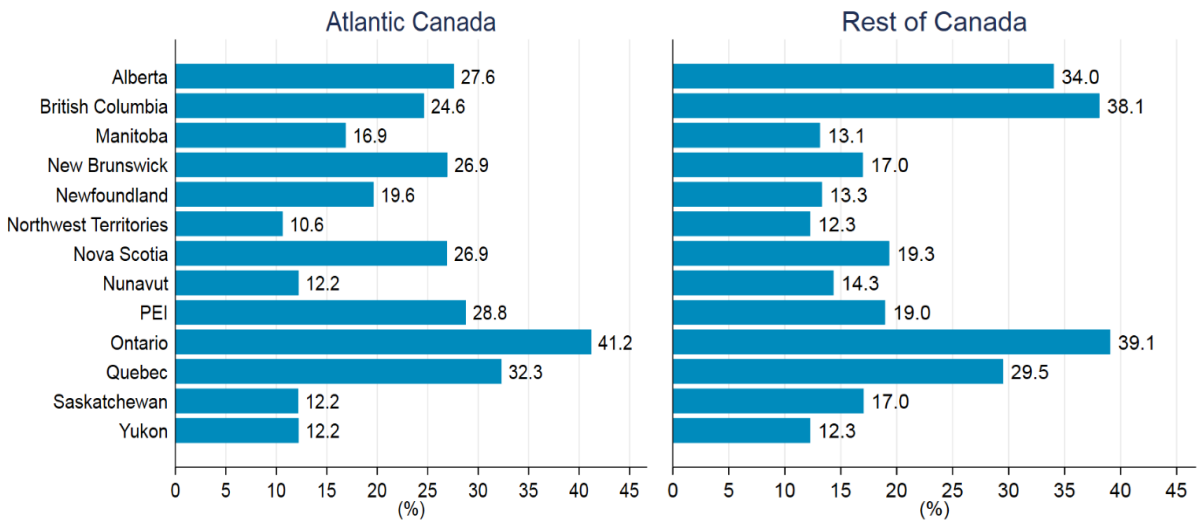
Australia (4.6%) and Japan (4.6%) were also identified as key opportunities for export expansion. Relatively few respondents selected Norway, China, Mexico, and Switzerland as viable options.

Appendix Figure A1 presents the responses for firms outside of the Atlantic region. Relative to the Atlantic region, a slightly higher proportion of respondents indicated that their firms were willing to expand trade (70.4% vs. 62.5%). Those outside the Atlantic region also recorded more diverse responses. While few respondents, if any, in the Atlantic region recorded these responses, notably greater proportions identified China (13.1%), Mexico (9.8%), and South Korea (6.2%).

Opportunities for New Domestic Trading Partners for Firms in Atlantic Canada. Interprovincial trade barriers have long hindered economic efficiency in Canada, with some estimates suggesting they may reduce GDP per capita by as much as 4%. Recently, momentum to reduce these barriers has grown, driven in part by initiatives introduced under Mark Carney. Federal and provincial efforts include new legislation, pilot programs, and public commitments aimed at lowering both explicit and implicit barriers to trade between provinces. Freer domestic trade could help offset the negative effects of U.S. tariffs on Canadian goods, and findings from our survey suggest that many firms are open to expanding their interprovincial export activity in response. Among exporting firms in the Atlantic region, 72.7% of respondents expressed willingness to increase exports to at least one Canadian province or territory. Notably, the precondition for entering new markets as part of the practical policy responses includes export preparedness, infrastructure limitations, or regulatory issues.

Figure 16 presents the percentage of exporting firms that indicated a willingness to increase trade with firms in specific provinces. Respondents could select multiple provinces without restriction. Unsurprisingly, the most commonly cited destinations correspond to Eastern Canada's largest provincial economies, reflecting the size and growth potential of these markets. While 41.2% report willingness to increase exports to Ontario, Quebec (32.3%) followed closely behind. Respondents also frequently noted opportunities to expand trade within the region: 28.8% for PEI, 26.9% for Nova Scotia and New Brunswick, and 19.6% for Newfoundland and Labrador.

***Figure 16**: Willingness to Increase Trade with International Partners among Exporting Firms*



Opportunities for New Domestic Trading Partners for Firms outside of Atlantic Canada. Willingness to expand trade with Atlantic Canadian provinces was mixed among respondents outside of the Atlantic region. Nova Scotia ranked fifth overall (19.3%), falling shortly behind Quebec (29.5%). New Brunswick was also highly reported, with 17.0% indicating a willingness to increase trade in these provinces, respectively. Newfoundland and Labrador, on the other hand, was the least frequently selected among the Atlantic provinces. The lower willingness to expand trade may reflect the province's reluctance to embrace interprovincial trade liberalization. For example, Newfoundland and Labrador was the only province to opt out of a national agreement that permits direct-to-consumer alcohol sales across provincial borders (Ryan, 2025).

6. Conclusions and Implications

The survey results offer valuable insights into the hiring practices of small and medium-sized enterprises (SMEs) in Atlantic Canada, revealing regional differences, variations by company characteristics, key reasons behind hiring challenges, and the integration of immigrant workers. These findings are further contextualized within the broader economic landscape. In particular, we consider how technological innovation is reshaping skill needs and labour demand, and we examine the anticipated impact of U.S. tariffs on small businesses.

In the last six months, 32.8% of respondents in Atlantic Canada reported that their experienced hiring challenges. Firms in Atlantic Canada were more to experience these challenges than elsewhere in Canada, which is a result that is consistent with broader labour market trends. Among those within the Atlantic region, large, older, and secondary sector firms were more likely to have experienced recruitment difficulties. The regional differences in hiring difficulties highlight the need for tailored, region-specific interventions to support equitable businesses growth across the country. In particular, policymakers ought to be concerned about the alignment between educational programs with skills that are in-demand in the labour market that will benefit both workers and employers alike.

While 69.3% of respondents from the Atlantic region express willingness to hire immigrants, only 45.3% had reported hiring immigrants over the past three years. This discrepancy is reflective of the region's difficulty in attracting qualified immigrant workers. One major barrier is limited outreach to newcomers and immigrant-serving agencies, which can lead to SMEs unintentionally overlooking qualified international candidates during recruitment and onboarding. In addition, SME owners and managers frequently voice frustration with immigration systems, pointing to a lack of clear information on processes and outcomes as a significant obstacle to hiring immigrants.

To better attract international talent in Atlantic Canada, policymakers should provide employers with training, guidance, and support in navigating the immigration system. Employers, in turn, should broaden their candidate search strategies. Few respondents reported using digital technologies in human resource management, yet these tools can offer significant advantages, including cost savings, increased efficiency, broader candidate reach, improved applicant filtering, and reduced risk of unconscious bias. Firms relying solely on traditional hiring practices may unintentionally restrict access to a diverse talent pool. Finally, settlement agencies should ensure immigrants have direct contact with employers and access to local job postings and employment resources to support optimal matching of skills and opportunities.

While attracting immigrant workers remains a challenge for Atlantic Canadian firms, retaining them is an equally pressing concern. In the region, 15.4% of respondents reported that their immigrant workers had left the province, compared to only 7.4% elsewhere in

Canada. One area for improvement is the implementation of immigrant-centered supports to facilitate the integration of international hires. As noted, only 10.5% of firms that had hired immigrants reported making changes to workplace practices to better support integration. For many newcomers, access to affordable housing, reliable public transportation, and accessible childcare are essential factors when evaluating employment opportunities. SMEs located outside Canada's major urban centres face particular difficulties in attracting talent, as local public infrastructure may not adequately meet these needs. Atlantic Canadian firms should take proactive steps to address these challenges.

As the Canadian economy rapidly digitalizes, the alignment between immigration and technological investment becomes increasingly important. The adoption of new digital infrastructure is driving a surge in demand for specialized digital skills. In our survey, 18.7% of respondents identified digital literacy as the most desirable skill in the coming years. Immigrants can play a key role in addressing labour shortages in professional and knowledge-based industries. Outside of the Atlantic region, our data show a strong complementarity between immigrant workers and artificial intelligence (AI) adoption: 58.0% of AI adopters had hired immigrants, compared to only 47.7% of non-adopters. This pattern is not evident in Atlantic Canada, indicating potential gaps that may need to be addressed in the future. Policymakers should provide timely labour market data to inform employers about current conditions and emerging skill shortages.

Finally, concerns have emerged about a potential economic recession in Canada, following the economy's contraction in the second quarter of 2025 and a decline in business sentiment. This is particularly relevant for recent immigrant workers, who are often disproportionately affected by economic downturns, experiencing higher rates of unemployment and underemployment. Our survey shows that while the majority of exporting firms in Atlantic Canada anticipate negative impacts from the trade war, few expect lasting effects on employment or long-term business planning, which is encouraging for immigrant workers. The Canadian economy also demonstrates strong resiliency, with many exporting firms seeking to expand domestic trade and the federal government reducing inter-provincial trade barriers. To further support this resiliency, policymakers should monitor business sentiment and provide targeted support to help firms diversify their trade relationships.

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Appendix

***Table A1**: Sector Definitions based on NAICS Industry*

Sector	Industry	NAICS codes
Service	Retail trade Accommodation and food services Real estate rental and leasing	44-45, 53, 72
Natural Resource	Agriculture, forestry, fishing and hunting Mining, quarrying, oil and gas extraction Utilities	11, 21, 22
Secondary	Construction Manufacturing Wholesale trade Transportation and warehousing	23, 31-33, 41, 48-49
Arts and culture	Information and cultural industries Arts, entertainment and recreation	51, 71
Education and healthcare	Public administration Educational services Health care and social assistance Administrative support, waste management, and remediation services.	56, 61, 62, 91,
Technical and professional	Finance and insurance Professional, scientific, and technical services, Management of companies or enterprises	52, 54, 55
Other	Other services (excluding public administration).	81

***Figure A1**: Willingness to Increase Trade with International Partners among Exporting Firms outside of Atlantic Canada (%)*

