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Employer Perspectives on AI in SMEs: Policy Insights for Productivity and Sustainable Careers

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Employer Perspectives on AI in SMEs: Policy Insights for Productivity and Sustainable Careers

Abstract

Purpose. This practitioner insights paper draws on employer perspectives to examine the challenges and opportunities of AI adoption in SMEs and to develop policy insights to enhance productivity and support sustainable careers.

Design/methodology/approach. Policy insights are derived from a survey of 1,700 business owners, executives, and senior managers, with particular attention to SMEs operating in Atlantic Canada.

Findings. Employers associated AI with productivity and efficiency gains, although adoption remained patchy across firms and regions. Many reported uncertainties regarding future skill needs, emphasized compliance training, and viewed AI primarily as a productivity tool.

Originality/value. This paper offers rare employer perspectives on the intersection of AI, productivity, and sustainable careers to inform policy.

Practical implications. Policymakers and multiple actors across the sustainable career ecosystem can support SME productivity by strengthening digital capabilities, workforce planning systems, and regional skills ecosystems. Such efforts may help ensure that AI adoption contributes to both productivity and sustainable career outcomes.

JEL classification

J21, J23, J24, J28

Keywords

AI, productivity, sustainable careers, SMEs, workforce development

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Setting the scene

Small and medium-sized enterprises (SMEs) are increasingly challenged to adopt artificial intelligence (AI) to enhance productivity. Although developments based on AI are often portrayed as opportunities to improve organizational performance, innovation, and access to talent, realizing these benefits requires investments in technology, workforce development, and organizational adaptation. Compared with larger firms, SMEs often face greater challenges building these capabilities because of more limited financial, managerial, and human resource capacity (Cardon and Stevens, 2004; Harney and Alkhalaf, 2021). Recent evidence further suggests that the performance gains associated with digitalization and work-from-home arrangements are often more readily realized by larger organizations, highlighting the need for policy support to help SMEs adopt and benefit (Hajiagha et al., 2026).

The effects of AI on SME productivity are closely intertwined with the development of sustainable careers. Sustainable careers have been defined as sequences of career experiences that unfold over time and across contexts related to individuals' ability to remain healthy, happy, and productive (Van der Heijden and De Vos, 2015; De Vos et al., 2020). While sustainable careers rely on both individual agency and accumulated experience, access to learning opportunities and organizational support remains critical. Research suggests that professional expertise is shaped less by tenure alone than by the learning value embedded within job roles and work assignments (Van der Heijden, 2001). Consequently, as AI reshapes work and learning opportunities within SMEs, employer perspectives can provide valuable insights for developing policies that support productivity and sustainable careers.

In this practitioner paper, we draw on employer perspectives to identify policy insights that can help SMEs benefit from AI to improve productivity while fostering sustainable careers. Consistent with the practitioner insights format (Harrison and Donald, 2024), we focus on evidence to derive actionable insights for policy development and practice.

Large-Scale Data on Employer Perspectives

Employer perspectives were drawn from the 2025 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 the Future Skills Centre and the Atlantic Canada Opportunities Agency. Building on earlier employer surveys conducted in 2020 and 2022, the survey examined workforce challenges and organizational practices among private-sector SMEs across Canada, with an intentional oversample of Atlantic Canada.

The survey was administered between April 11 and August 21, 2025, and collected responses from 1,700 SME leaders, including owners, executives, managers, and HR directors, of whom 797 were located in Atlantic Canada. A stratified random sampling approach was used to ensure representation across firm size, sector, and region, ranging from micro-businesses (2–4 employees) to larger SMEs (up to 499 employees). Descriptive analyses indicated that the sample closely aligned with Statistics Canada's Business Registry. In addition to collecting information on organizational characteristics, the survey examined labour shortages, skill demand, current and anticipated adoption of artificial intelligence, and the potential impacts of U.S. tariffs on Canadian businesses. Survey questions were subjected to validity and reliability testing prior to administration. Additional information regarding the survey design, sample, and employer characteristics is available in Fang et al. (2025b).

Sample Context

Although Canada's productivity performance is broadly comparable to that of several advanced economies, including the United Kingdom and the euro area, it continues to lag behind leading performers such as the United States and, in some periods, Australia (OECD, 2025). However, concerns regarding Canada's long-term productivity outlook have intensified in recent years. International comparisons indicate that Canada's productivity growth has

lagged behind several peer economies, while Statistics Canada reports that the productivity gap between Canada and the United States has widened steadily since the mid-1980s, particularly since the late 1990s (McCormack and Macdonald, 2026). This persistent challenge has increased pressure on organizations to improve productivity while generating greater value from available resources (RBC Economics, 2024).

Employer Experiences and Policy Insights for Productivity and Sustainable Careers

Employer Experiences

Below, we present employers' perspectives on AI in SMEs. We highlight the key findings and implications for productivity and sustainable careers (see Table I).

Insert Table I about here

Policy Insights for Productivity and Sustainable Careers

The findings presented in Table I suggest that the challenge facing SMEs extends beyond whether they adopt AI to whether organizations possess the capabilities needed to capitalize on technological investments for productivity gains and sustainable workforce outcomes. In this sense, AI should be viewed not as a destination, but as a bridge. While AI can help organizations move toward higher productivity and new ways of working, successfully crossing that bridge requires complementary investments in workforce skills, organizational capabilities, and supportive policy ecosystems. Responsibility for developing these capabilities extends beyond SMEs themselves and includes provincial and federal governments, regional economic development agencies, industry associations, chambers of commerce, educational institutions, and workforce development organizations. From a sustainable career perspective, organizational investments in AI, skills development, and workplace flexibility may shape the contexts within which workers pursue sustainable careers

over time. Consequently, policies designed to improve SME productivity should also consider how transformative change can shape workers' opportunities to remain healthy, happy, and productive throughout their time working. Three policy insights emerged.

Supporting digital capability development in SMEs. Our analysis shows that AI adoption in Atlantic Canada is not only low but also unevenly distributed across firms, with only 24.6% of organizations reporting use compared to 30.4% in the rest of Canada (Table I). Adoption is concentrated among organizations with greater resources, including larger firms (34.7%), younger firms (36.0% for those operating 1-10 years), and knowledge-intensive sectors such as arts and culture (46.2%). In contrast, adoption rates are substantially lower among micro-businesses (25.4%), older firms (21.3% for those operating 30+ years), and sectors such as secondary (20.9%) and service industries (22.1%). While AI adopters reported benefits including improved operational efficiency (64.4%) and organizational productivity (53.7%), these findings suggest that the challenge facing SMEs is not simply whether to adopt AI, but whether firms possess the capabilities required to benefit from technological change.

This uneven pattern of adoption points to the need for policies that move beyond technology acquisition and instead support broader digital capability development. AI advisory services, regional innovation hubs, digital extension programs, and university-industry partnerships may help SMEs develop the managerial, technical, and organizational capabilities required to successfully implement new technologies. Such investments are particularly important because AI has the potential to also facilitate knowledge diffusion, help smaller firms access capabilities traditionally associated with larger organizations, and address labour and skills shortages (Gunderson, 2025). Consistent with research highlighting the importance of human capital and regional innovation ecosystems (Florida et al., 2008), strengthening regional capability supports may help reduce disparities in AI adoption while enabling SMEs to more effectively leverage technological change.

The importance of complementary capabilities extends beyond AI adoption and is also reflected in employers' experiences with remote work. Firms that offered greater flexibility for remote work were more likely to expand remote work practices, which in turn were associated with improvements in productivity and innovation (Fang et al., 2025a). These findings suggest that the benefits of technological and workplace innovation also depend on investments in supporting infrastructure for workforce capabilities and organizational readiness. Consequently, policies that expand access to digital infrastructure, strengthen remote work readiness, and support SME digital transformation may help smaller firms access broader talent pools, improve workforce retention, and reduce the risk that technological change widens productivity gaps across firms and regions.

These findings suggest an important role for governments, regional development agencies, industry associations, chambers of commerce, and educational institutions in supporting SME digital transformation. While firms ultimately decide whether and how to adopt AI, many SMEs lack the resources required to independently develop digital capabilities. This challenge is reflected in Table I, where adoption remains concentrated among firms with greater resources despite widespread recognition of AI's productivity benefits. Consistent with the sustainable career ecosystem perspective (Donald et al., 2024), which views career outcomes as shaped by interactions among multiple actors and institutions, the benefits of technological change likely depend on access to broader supports that enable learning, innovation, and workforce development. Strengthening these ecosystem supports may help SMEs improve productivity while creating conditions that support workforce adaptability and sustainable careers.

Strengthening workforce planning and skills ecosystems. A second finding is the apparent disconnect between technological adoption and workforce development. Most employers were unable to identify future skill needs associated with AI, and where training

priorities were identified, they tended to focus more on compliance requirements over digital capability development. Our analysis indicates that digital literacy was the most frequently cited future skill requirement, yet only 18.7% of Atlantic Canadian firms identified it as a priority, compared with 21.3% in the rest of Canada. Furthermore, employers were more likely to prioritize compliance training, such as industry certification (21.4%), than training related to new technologies (10.2%). At the same time, one in four Atlantic Canadian firms reported adopting AI. Together, these findings suggest that many SMEs are adopting AI without a clear understanding of the workforce capabilities required to support its effective use.

This disconnect is important because the benefits of AI appear to hinge on workforce preparedness. Organizations that lack insight into future skill requirements may struggle to fully realize the productivity gains associated with AI or to prepare employees for changing work demands. Such uncertainty is particularly notable given emerging evidence that AI knowledge and digital literacy are increasingly viewed as future work skills that support adaptation to technological change and evolving labour market requirements (Ahmad and Bilal, 2025).

The findings, therefore, point to the need for stronger workforce planning systems that help employers anticipate and respond to emerging skill requirements. Governments, workforce development organizations, industry associations, and educational institutions can play an important role by improving access to labour market intelligence, sector-specific forecasting, micro-credentials, and collaborative training initiatives. Such supports may help SMEs move beyond focusing on compliance toward more proactive workforce development strategies.

From a sustainable careers perspective, investments in workforce planning and continuous learning help create the conditions that enable workers to adapt to changing skill

demands and maintain employability over time. Moreover, from a sustainable career ecosystem perspective, strengthening regional skills ecosystems through collaboration among employers, educational institutions, training providers, workforce development organizations, and policymakers may therefore support both workforce adaptability and SME productivity as AI continues to reshape work and careers.

Using AI to support sustainable and inclusive careers. We also found that employers predominantly view AI as a productivity tool rather than a tool for workforce development or inclusion. This was particularly evident in employer perspectives on newcomer integration. Among firms that responded to the question (54.1% of Atlantic firms), the majority either had not considered whether AI could support immigrant integration or believed that it could not (28.9%). Actual use of AI for immigrant support was limited, with language training (15.2%), cross-cultural communication (7.2%), and job-specific training (6.4%) representing the most common applications. Moreover, only 10.5% of Atlantic Canadian firms that hired immigrants reported making changes to workplace practices to better support integration. This is particularly concerning given that immigrant retention remains a challenge in the region, with 15.4% of firms reporting that immigrant workers subsequently left the province, compared with 7.4% elsewhere in Canada. Together, these findings suggest that many employers have yet to recognize the broader workforce development potential of AI.

This finding is particularly important given ongoing debates about the future of work. While concerns about AI often focus on job displacement and the potential marginalization of certain groups of workers (Baruch, 2022; Donald et al., 2024), AI also offers opportunities to augment human capabilities, improve productivity, and address persistent labour and skills shortages (Budhwar et al., 2023). This interpretation is consistent with employer reports that current AI adoption has had limited effects on employment levels and wages, suggesting that AI is presently being used more as a complement to labour than as a substitute. Our findings

suggest that SMEs are largely leveraging AI for operational efficiency while underutilizing its potential to support workforce development and inclusion. The policy challenge is therefore not simply whether AI is adopted, but how it is adopted. Without deliberate efforts to encourage forms of AI adoption that complement human capabilities, support learning, and facilitate workforce participation, regional SMEs may miss opportunities to address labour shortages while strengthening workforce integration.

These findings are particularly relevant from a sustainable careers perspective. Sustainable careers depend on creating conditions that enable individuals to remain healthy, happy, and productive over time (Van der Heijden and De Vos, 2015; De Vos et al., 2020). Viewed through this lens, AI and workforce development policies are important contextual resources that can either expand or constrain opportunities for career sustainability. For example, AI training, onboarding, language development, and knowledge-sharing applications may help workers adapt to changing job requirements, navigate career transitions, and participate more fully in the labour market. Conversely, unequal access to digital technologies, learning opportunities, or supportive workplace practices may reinforce existing labour market inequalities and limit long-term employability.

Consequently, policy interventions should focus also on ensuring that workers have equitable access to learning opportunities and developmental resources. Particular attention may be needed for groups that face barriers to labour market participation, including immigrants, older workers, and individuals in smaller or more remote labour markets. By encouraging AI adoption that complements human capabilities and supports workforce participation, coordinated action across the sustainable career ecosystem can strengthen both productivity and sustainable career outcomes (Donald et al., 2024).

Conclusion

This practitioner insights paper identifies policy opportunities for using AI to enhance productivity while supporting sustainable careers in SMEs. The evidence suggests that AI can serve as a bridge toward new forms of productivity and career development, but it requires coordinated action across multiple actors to ensure that technological change supports both organizational performance and inclusive, sustainable economic growth.

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Table I. Employer perspectives on AI in SMEs: Key findings and implications for productivity and sustainable careers

Theme	Evidence from SMEs	Implications for Productivity and Sustainable Careers
Patchy AI adoption	Only 24.6% of Atlantic Canadian firms reported adopting AI. Adoption was highest among larger, younger, and knowledge-intensive firms.	AI adoption may widen productivity gaps between firms if smaller organizations lack the resources and capabilities needed to implement new technologies effectively.
Use of AI for productivity	AI was most commonly used for marketing and advertising (62.2%), productivity improvement (55.1%), and product design (42.8%).	Employers primarily view AI as a tool to improve efficiency and support business operations (not as a means to replace workers).
AI as a complement to labour	Few firms reported impacts on employment levels or wages.	Current AI adoption appears to complement human labour, highlighting the continued importance of workforce development and skills investment.
Limited workforce planning	Most employers were unable to identify future AI skills needs or training priorities.	Uncertainty regarding future workforce requirements may limit organizations' ability to proactively prepare employees for technological change.
Emerging digital skill requirements	Digital literacy was the most frequently identified future skill requirement.	Future workforce development may need to emphasize transferable and digital capabilities that support adaptation to AI work environments.
Compliance over capability development	Employers more frequently emphasized industry certification and compliance training than AI upskilling.	SMEs may require additional support to shift from short-term compliance training toward long-term capability development and career sustainability.
Underutilized support for workforce integration	Few firms viewed AI as a tool for supporting immigrant integration, although some identified opportunities in language training and job-specific learning.	AI may offer untapped opportunities to enhance labour market inclusion, workforce participation, and access to talent.
Need for ecosystem support	Adoption rates and applications varied substantially across firms and regions.	The benefits of AI may depend on coordinated ecosystem supports, including digital infrastructure, workforce development systems, learning opportunities, and institutional partnerships.