

AI Adoption in Canadian SMEs

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Abstract: Artificial intelligence (AI) is reshaping business operations, yet evidence on its uptake among small and medium-sized enterprises (SMEs) remains limited. This paper examines artificial intelligence adoption among Canadian small and medium-sized enterprises (SMEs) using secondary data from Statistics Canada and contextual evidence from Innovation, Science and Economic Development Canada (ISED). The findings show size-based differences in AI adoption, with higher use among firms with 20 to 99 employees than among smaller firms. Common applications include data analytics, text analytics, chatbots, natural language processing, and large language models. Barriers differ by size: smaller firms report limited relevance, while larger firms emphasize cybersecurity, privacy, skills, and data concerns. The study highlights AI adoption as both a technological and organizational readiness issue.

Keywords: Artificial Intelligence, SMES, Canada, Digital Transformation, Technology Adoption

JEL Classification Number: O33, M15

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