



AI AT WORK: PROMISES AND PITFALLS

Solo_Data

Khuong Nguyen

Ha Nhi Tran

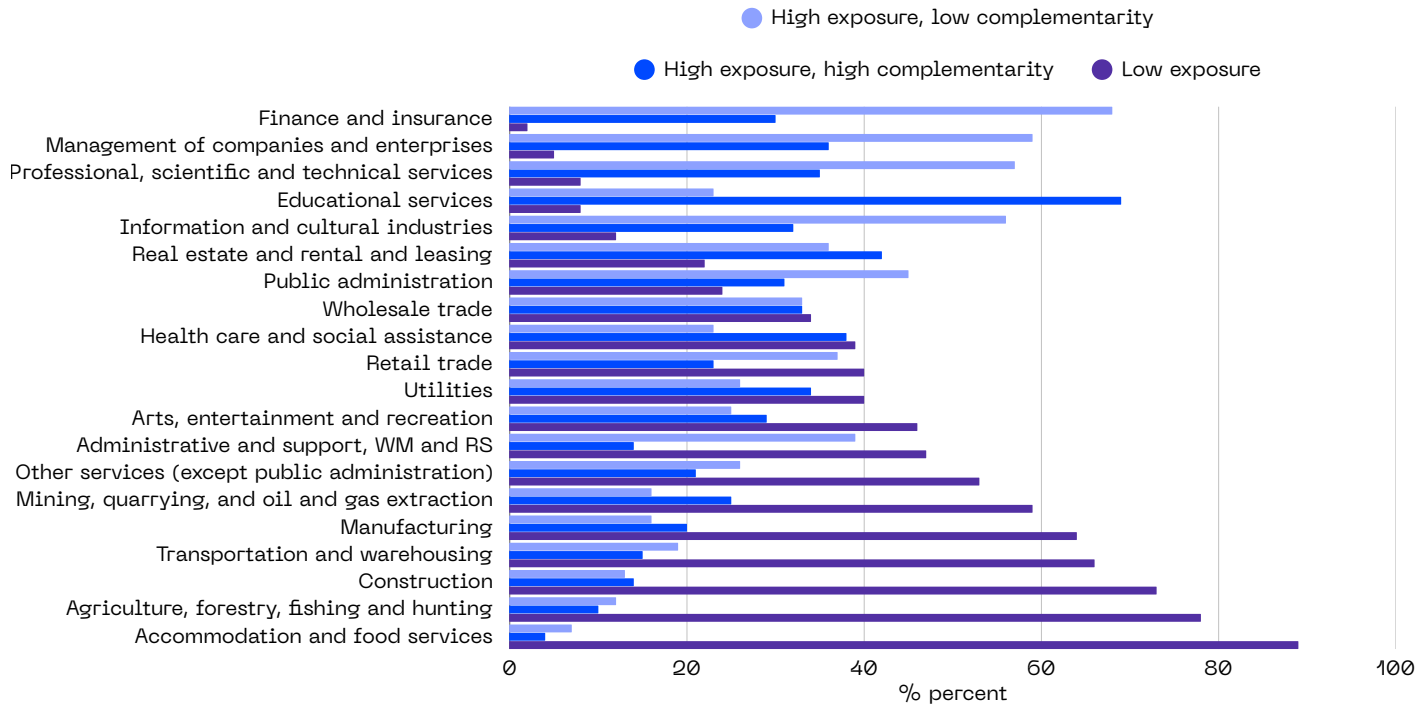
Huong Thao Nguyen

"AI is no longer a future threat but a present reality. Its adoption varies by region and sector, but its impacts are already visible in productivity, wage patterns, and hiring practices"

Where AI Hits First: Industry and Region?

Effects of AI on Canadian Job Industry

Based on AIOE from 2021

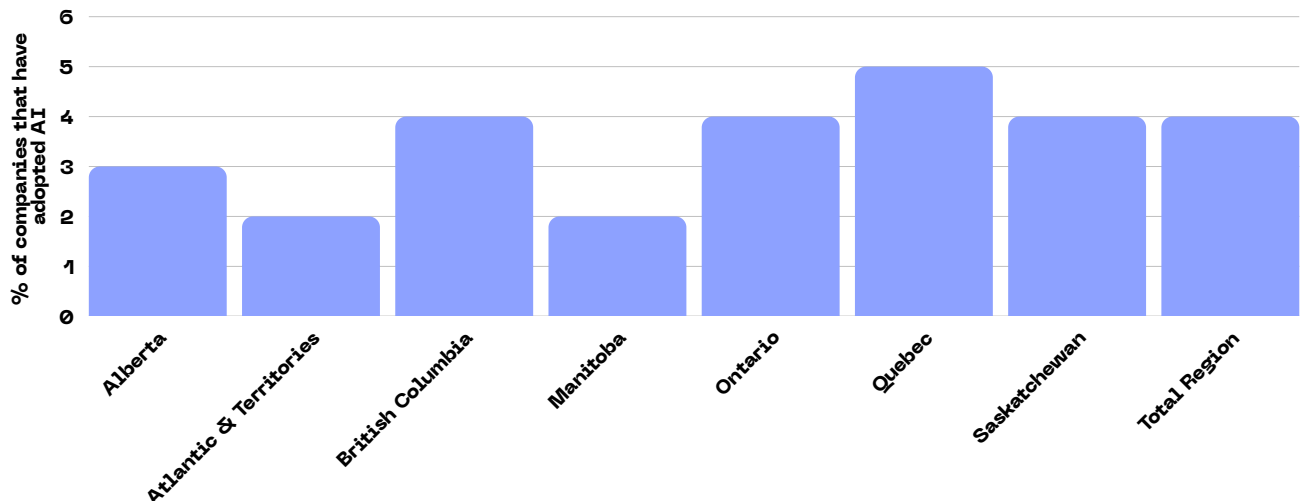


Source: Statistic Canada

- **Finance, insurance, and professional services** are most AI-exposed with.
- **Accommodation, food services, and agriculture** are least exposed.

Regional Adoption of AI Usage in Canada

from 2021



Source: Survey of Digital Technology and Internet Usage

Ontario and Quebec lead AI adoption; **Atlantic & Territories** lag.

NARRATIVE:

High-skill service industries face the **most transformation**, while **resource and hospitality sectors lag** in adoption

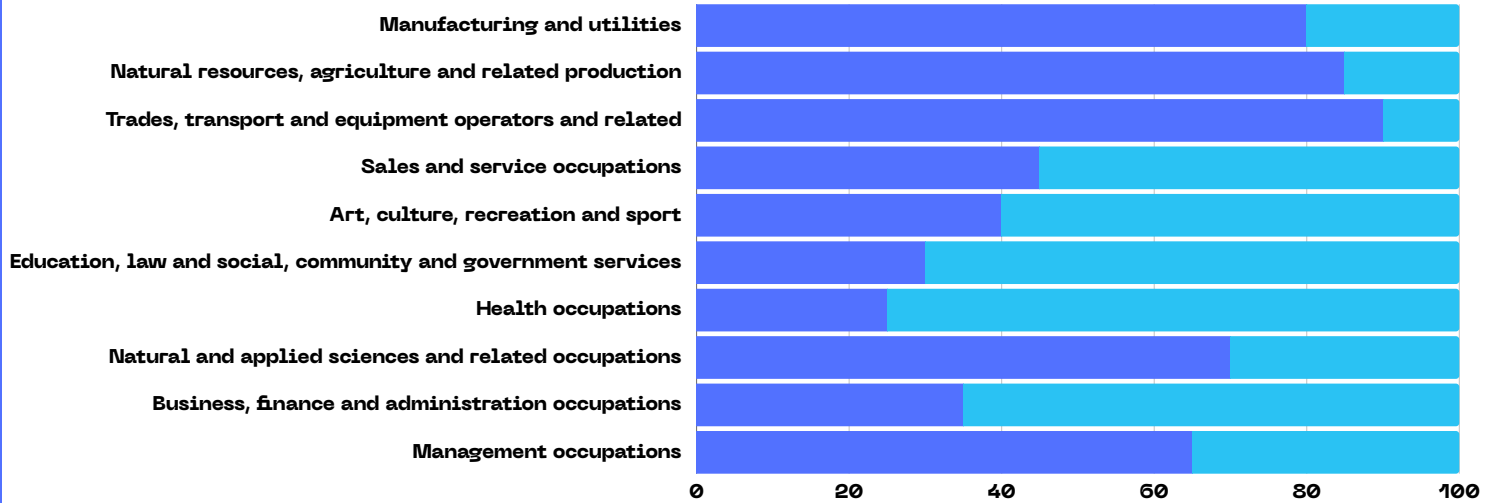
SIGNALING UNEVEN READINESS ACROSS CANADA!

NOT ALL WORKERS ARE AFFECTED EQUALLY!!!

Women and Men in Occupation

in percent from 2022

● Male (%) ● Female (%)



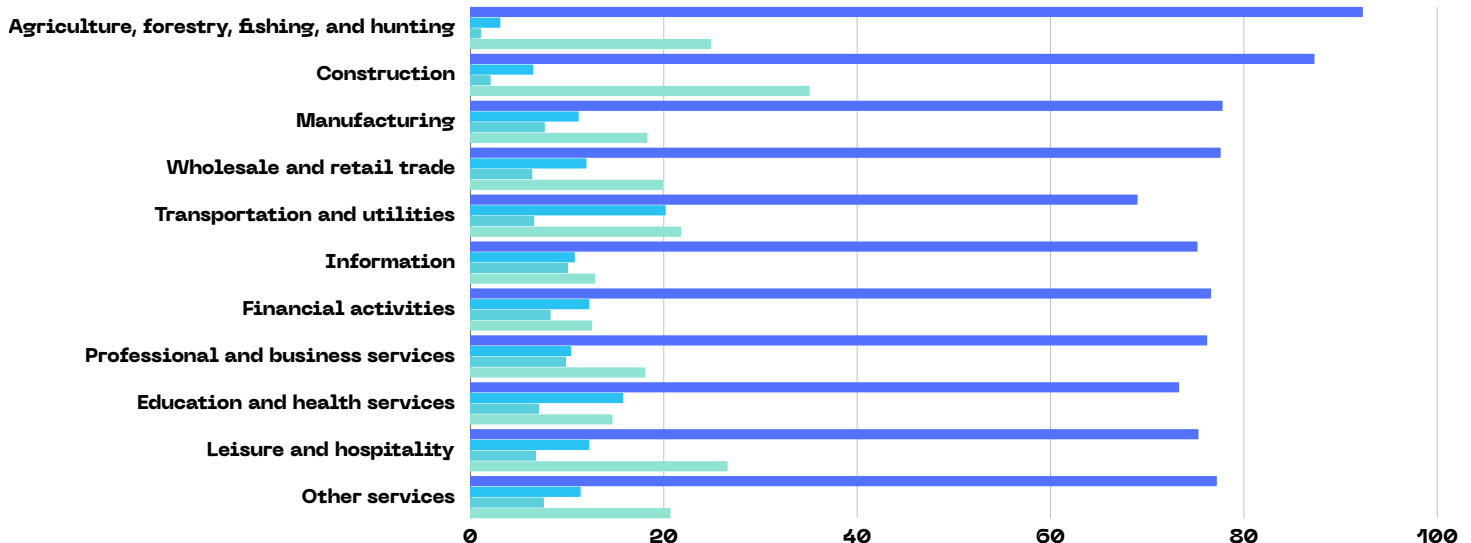
Source: Statistic Canada

- **Men** dominate **higher-paying, AI-exposed roles** (e.g., tech, management).
- **Women** cluster in healthcare and education — jobs **complementary to AI but not always rewarded with wage premiums**.

Employed Person by Industry and Race

in percent from 2024

● White ● Black or African American ● Asian ● Hispanic or Latino



Source: Bureau of Labor Statistic

Racial disparities remain: **White and Asian** workers are overrepresented in **AI-exposed, higher-wage industries**; **Black and Hispanic** workers are concentrated in **service, transport, and retail**.

NARRATIVE:

Men and certain racial groups capture more of the **wage and opportunity gains**

AI AMPLIFIES EXISTING INEQUALITIES!

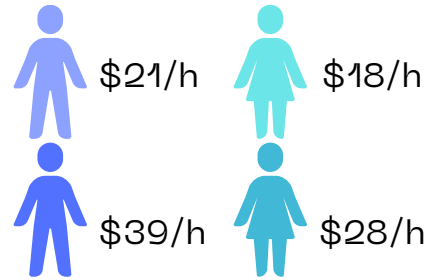
WAGES RISING – BUT NOT FOR EVERYONE!!!



Source: PWC's report

Does people earn more?

A U.S. study by Pew found that in 2022, workers in jobs with high exposure to AI were making ~\$33/hr on average, versus ~\$20/hr for those in jobs with low AI exposure



Source: O*NET (Version 27.3) and IPUMS 2022

Gender gap persist:

Women in high-exposure jobs earn no more than women in medium-exposure roles (\$28 vs. \$29/hr), suggesting AI exposure benefits men's wages more than women's.

NARRATIVE: Exposure to AI brings **wage premiums**, but **women do not benefit equally**

The Disappearing Entry-Level Job!



Slower hiring of new graduates in AI-related fields

- **Hiring slowdown in AI fields:** OECD finds fewer entry-level hires in AI/tech; firms prefer experienced workers.
- **Disappearing entry-level jobs:** Maclean's notes automation is erasing starter roles (customer service, admin, retail, junior analyst).
- **Career ladder disruption:** With fewer "stepping-stone" jobs, grads struggle to gain experience, reinforcing employer demands for prior experience → exclusion cycle.
- **Income scarring:** Labour economics shows delayed career starts cause long-term penalties—lower wages and slower progression lasting 10–15 years.



Shifting role composition: augmentation, not just replacement

The FSC "Implications of AI" report notes that job postings for highly automatable jobs have declined post-2022, signaling a shift in hiring toward roles that complement AI rather than compete with it. Future Skills Centre

The OECD finds that among jobs exposed to AI, demand for social and language skills, communication, and management has increased — roles less likely to be automated.

NARRATIVE: AI is not just **reshaping existing roles** — it's **removing stepping-stones for young workers**, raising **barriers to upward mobility**.

The Road Ahead: AI and the future of work

2030

Most Canadian industries will have adopted AI in some form, with service and knowledge sectors leading.



AI adoption growth is rapid in Ontario and Quebec, and expected to spread to other provinces.



60%

OECD projects that over 60% of jobs in advanced economies are exposed to AI; about half may see task replacement, the other half augmentation.

"AI is here to stay, and by the end of this decade, its presence in the Canadian and U.S. job market will be universal"

Adoption is projected to deepen across every sector, with professional services, finance, healthcare, and education leading in AI-augmented work.



"But AI's benefits are unevenly distributed"

AI will split the workforce between those who can complement AI and those who risk being displaced by it. This divide could harden existing inequalities if not addressed.



Conclusion

- Groups most likely to benefit: highly educated, men, and those in professional/technical fields.
- Groups facing barriers: women, racial minorities in low-wage service sectors, and new graduates.
- Recommendation: Reskilling, inclusive hiring, and policy to preserve career ladders.