AI Jobs Barometer
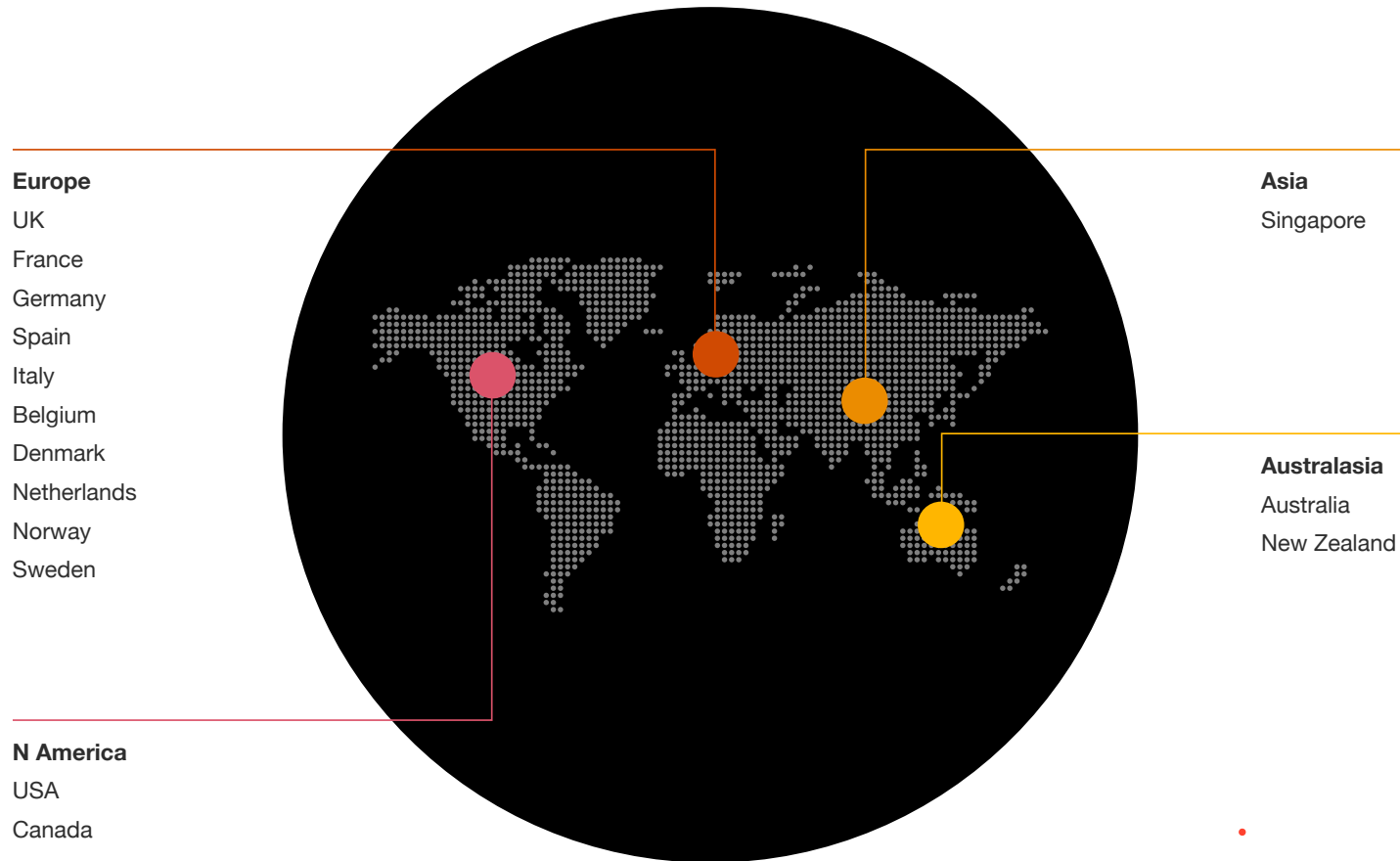
Canada Findings

pwc

The AI Jobs Barometer uses half a billion job ads from 15 countries to examine AI's impact on jobs, skills, wages, and productivity

Europe
UK
France
Germany
Spain
Italy
Belgium
Denmark
Netherlands
Norway
Sweden

N America
USA
Canada

Asia
Singapore

Australasia
Australia
New Zealand

Executive Summary of Global Findings

We find evidence that AI is transforming what workers and companies can achieve. There is no going back to yesterday's jobs market, but - if carefully managed - this jobs transition could bring a bright future for workers.

Our data shows AI may be able to help with deep economic challenges. Sectors more exposed to AI are seeing sharply higher labour productivity. This could help to break many nations out of persistent low productivity growth, generating economic expansion, higher wages, and enhanced living standards. In addition, we find that AI can help to ease labour shortages that are likely to become more acute as populations age.

Workers must adapt to an AI era. Old skills are disappearing from job ads - and new skills are appearing - 25% faster in jobs more exposed to AI. To stay relevant in these roles, workers may need to demonstrate or acquire new skills. Workers who learn to harness AI are likely to be more productive and valuable than ever, and all within a context of rising societal prosperity.

One key to a bright future for workers is for companies and workers to fully embrace AI. Instead of thinking only about how AI can replace people (which is fundamentally backward-looking), we should think inventively about how we can make the most of AI to create entirely new industries and roles for people.

Our findings suggest priority actions for companies, workers, and policymakers to manage a disruptive jobs transition while realising the potential of AI to do good for society.

Good news for the global economy

- 4.8x greater labour productivity growth in sectors more exposed to AI
- 27% lower growth in job openings in AI-exposed roles, helping to ease labour shortages
- Jobs that require AI skills carry up to a 25% wage premium on average, underlining the value of these skills to companies

A disruptive jobs transition

- Skills required for AI-exposed jobs are changing 25% faster than in less exposed jobs
- Sharp declines in demand for some AI-replaceable skills
- Some skills rising in demand complement AI or are relatively immune to AI disruption

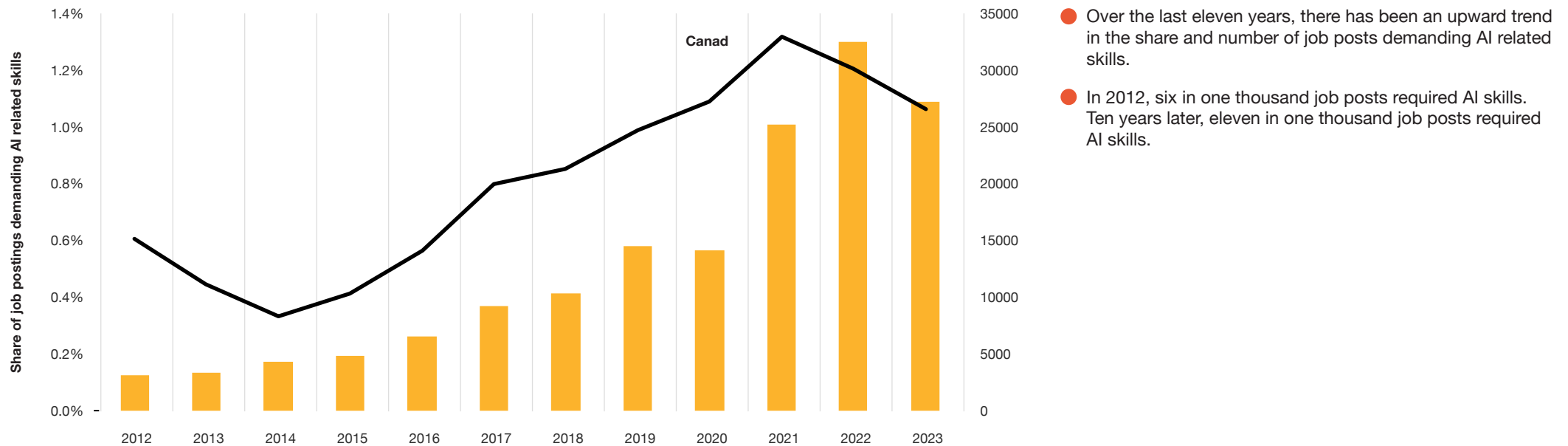## Next steps for policymakers, companies, workers

- Embrace uses of AI to grow productivity and prosperity, ensuring benefits are shared
- Encourage use of AI in partnership with people (which can lead to better results)
- Upskill workers for an AI age
- Ensure the responsible use of AI

Canada Findings

The share and number of job postings in Canada demanding AI related skills has increased significantly since 2012

Total number and share of job postings requiring AI related skills, Canada, 2012-2023

- Over the last eleven years, there has been an upward trend in the share and number of job posts demanding AI related skills.

- In 2012, six in one thousand job posts required AI skills. Ten years later, eleven in one thousand job posts required AI skills.

Sources: PwC analysis of Lightcast data

The share of job postings by the Financial and Professional Services sectors has decreased significantly since 2012

Share of all job postings by sector, Canada, 2012-2023
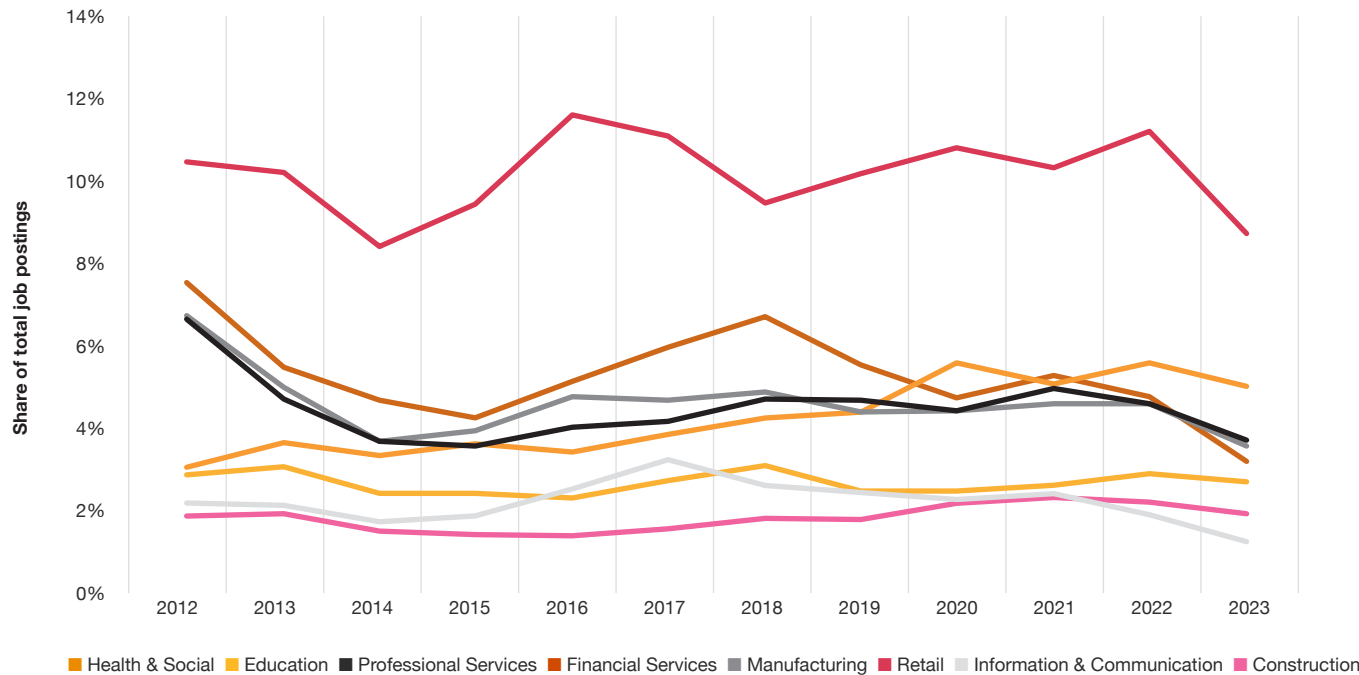
- The Health & Social sector increased its share of job postings by 2.0 percentage points.

- During the period, the share of the Financial, Professional and Manufacturing Services sectors decreased by an average of 3.5 percentage points.

- The Education, Information & Communication and Construction sectors remained relatively stable during the period, with limited change in their share of postings.

Legend: ■ Health & Social ■ Education ■ Professional Services ■ Financial Services ■ Manufacturing ■ Retail ■ Information & Communication ■ Construction

Demand for AI skills has increased significantly since 2012 across most sectors

Share of AI job postings in each sector, Canada, 2012-2023
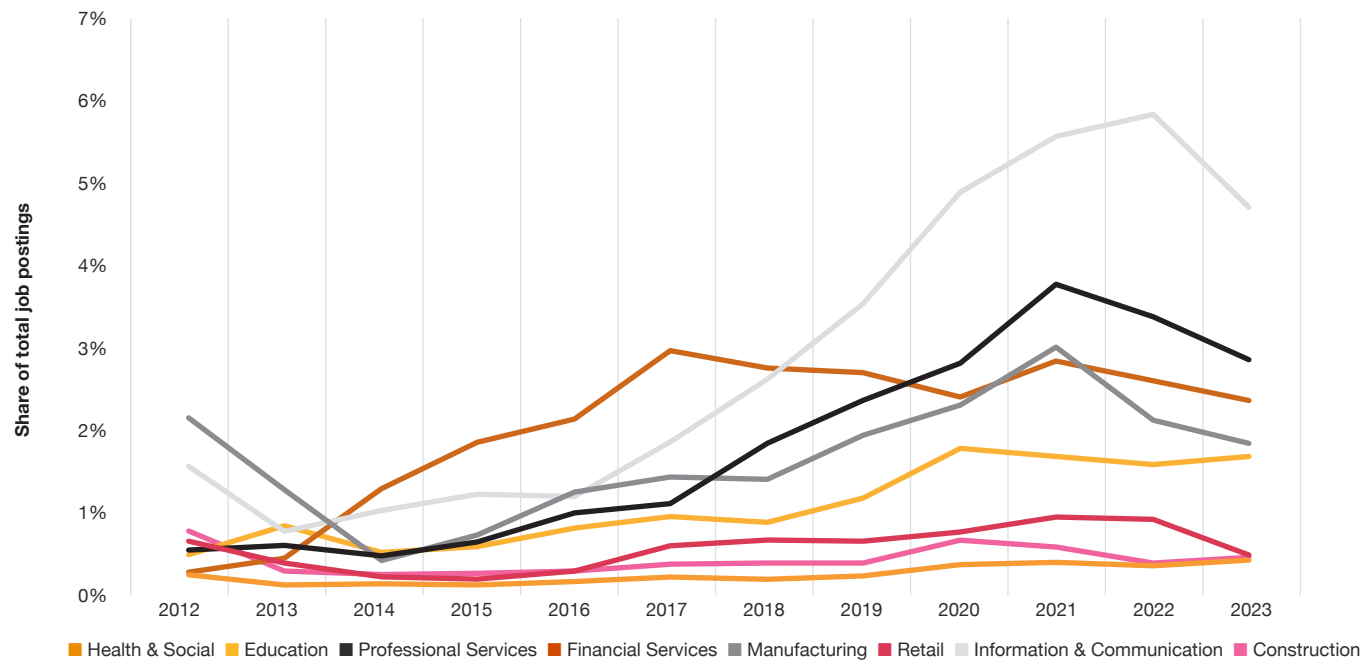
- For the Information & Communication sector, less than two in a hundred job posts required AI skills in 2012. Eleven years later the sector required at around five in a hundred job posts required AI skills.

- The Professional Services, Financial Services, Manufacturing and Education sectors also experienced increases in share of job posts requiring AI skills during the period.

Legend: Health & Social, Education, Professional Services, Financial Services, Manufacturing, Retail, Information & Communication, Construction

Sources: PwC analysis of Lightcast data
Notes: In this figure we consider seven of the 21 sectors. The seven sectors capture public, private and financial sectors and are commonly considered together in socio-economic analysis.
Sectors excluded: Agriculture, Mining, Power, Water, Retail trade, Transportation, Accommodation, Real Estate, Administrative activities, Arts and Entertainment, Household activities and Extraterritorial Activities. Fluctuations in yearly data should be considered in the context of broader trends, as they may result from various temporary or sector-specific factors, including the impact of events such as the COVID-19 pandemic.

Occupations which are highly exposed to AI altered their skill mix more

Net change in the number of skills demanded against AI, Canada, 2019-2023

Correlation coefficient 0.43
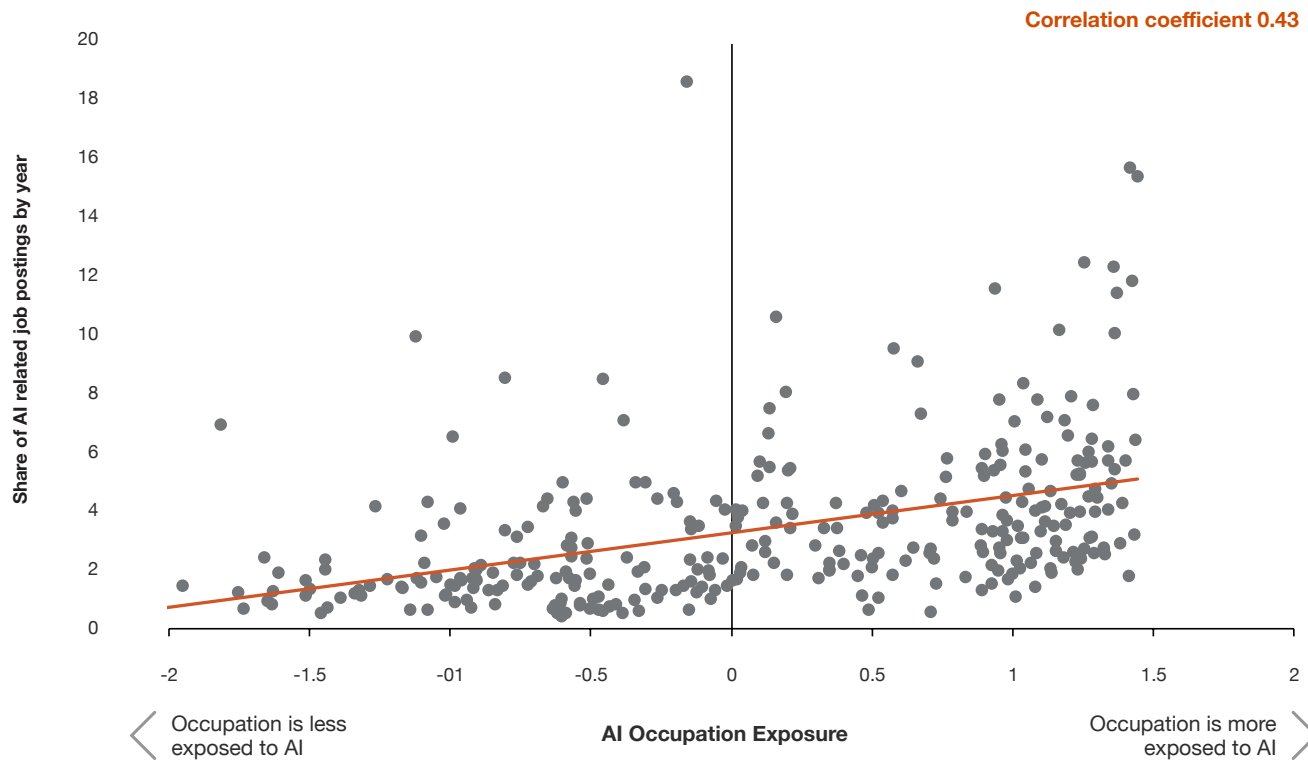
- There is a positive correlation between occupations being exposed to AI and their net-skill change.

- This suggests that workers in occupations highly exposed to AI may have to acquire more new skills over the course of their career than do workers in lower exposed occupations.

- This may be associated with AI replacing or complementing skills, especially among jobs more exposed to AI.

(Chart axes: Y-axis "Share of AI related job postings by year" from 0 to 20; X-axis "AI Occupation Exposure" from -2 to 2. Left annotation: "Occupation is less exposed to AI"; right annotation: "Occupation is more exposed to AI")

On average, job postings demanding AI skills are associated with a 11% wage premium

Wage premium for occupations demanding AI skills, Canada, 2023

Occupation	Wage Premium
Graphic and Multimedia Designers	33%
Database and Network Professionals	30%
Web and Multimedia Developers	26%
Research and Development Managers	19%
Accountants	17%
Software Developers	16%
Systems Analysts	15%
Mechanical Engineering Technicians	10%
Managing Directors and Chief Executives	9%
Domestic Housekeepers	1%

- From the listed occupations, job posts for Graphic and Multimedia Designers are associated with the larger wage premium for roles demanding AI-skills.

- Jobs with lower AI Exposure such as Domestic Housekeepers see very little difference in wages for postings demanding AI-related skills.

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AI Jobs Barometer 2024

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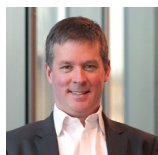Partner, Digital & Emerging Technologies, PwC india

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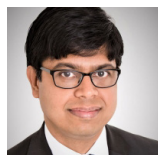UK Responsible AI and AI for Good Lead, PwC UK

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