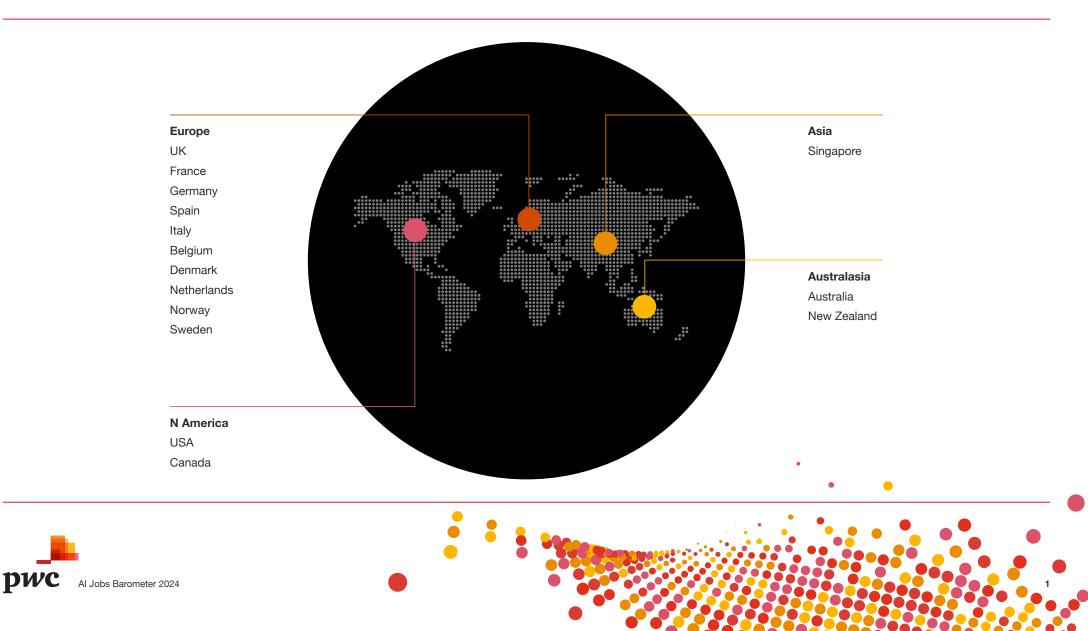
AI Jobs Barometer • USA Findings •

pwc

pwc.com/aijobsbarometer

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



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

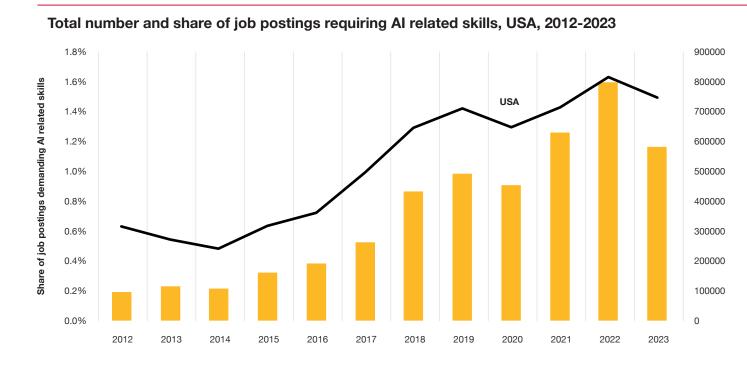
- · Embrace uses of AI to grow productivity and prosperity, ensuring benefits are shared
- Encourage use of AI in partnership with people (which can lead to better results)
- · Upskill workers for an AI age
- Ensure the responsible use of AI







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

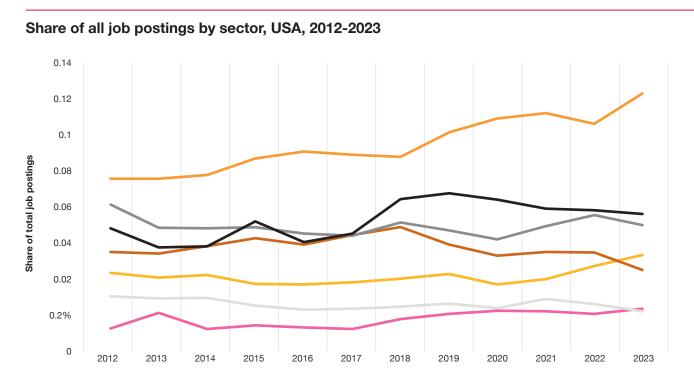


- Over the last eleven years, there has been an upward trend in the share and number of job posts demanding Al related skills.
- In 2012, six in one thousand job posts required AI skills. Ten years later, fourteen in one thousand job posts required AI skills.

Sources: PwC analysis of Lightcast data



The Health & Social sector has remained the largest seeker of employees over the last decade



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

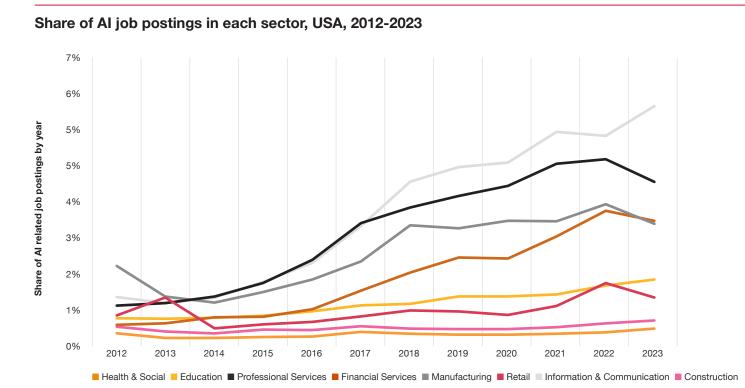
Sources: PwC analysis of Lightcast data

Notes: In this figure we consider seven of the 19 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.



Demand for jobs demanding AI skills has increased in most sectors between 2012 and 2023



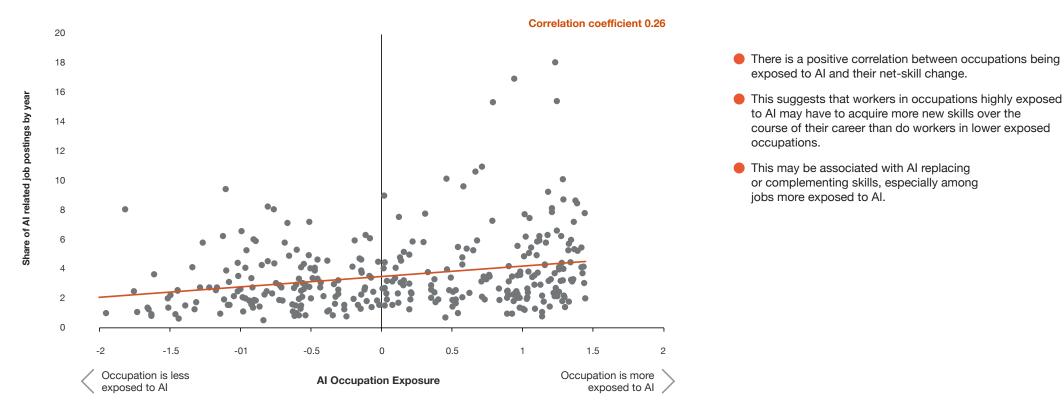
- Sectors highly exposed to AI, such as the Financial Services, Information & Communication and Professional Services have experienced a significant increase in the share of online job postings that demand AI-related skills.
- For the Information and Communication sector in 2012, roughly one in a hundred job posts required AI skills. Eleven years later, six in one hundred job posts required AI skills.
- The Professional Services, Financial Services and Manufacturing sectors also increased relatively consistently during the period, growing by 3.0, 2.5 and 1.0 percentage points respectively.

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, USA, 2019-2023

Sources: PwC analysis of Lightcast data, ISCO-08 Occupation Codes (4-digit level), Felten et al. (2021).

Notes: The net skill change is based on Deming and Noray (2020) and is calculated by using the difference between 2019-2023 in the total number of skills required by job occupations using the ISCO-08 4-digit occupational codes. The AI Occupation Exposure is from Felten et al's (2021). and measures the degree to which occupations rely on abilities in which AI has made the most progress in recent years. The correlation coefficient is the statistical measure that quantifies the strength and direction of a linear relationship between unfilled job vacancies and AI Sectoral Exposure.



On average, job postings demanding AI skills are associated with a 25% wage premium

Wage premium for occupations demanding AI skills, USA, 2023

Occupation	Wage Premium
Managing Directors and Chief Executives	84%
Lawyers	49%
Financial Analysts	33%
Applications Programmers	32%
Systems Analysts	30%
Accountants	18%
Database and Network Professionals	18%
Electrical Engineering Technicians	6%
Freight Handlers	2%
Lifting Truck Operators	1%

- From the listed occupations, job posts for Managing Directors & Chief Executives, Lawyers and Financial Analysts are associated with the larger wage premium for roles demanding Al-skills.
- Jobs with lower AI Exposure such as Freight Handlers and Lifting Truck Operators see very little difference in wages for postings demanding AI-related skills

Sources: PwC analysis of Lightcast data, ISCO-08 Occupation Codes (4-digit level)

Notes: These findings may not necessarily imply a causal relationship. These estimates are calculated by comparing the average salaries of AI job postings to those of non-AI postings for the same occupations.



Partner Sponsors



Carol Stubbings Global Markets and TLS Leader



Scott Likens Global AI and Innovation Technology Leader



Peter Brown Global Workforce Leader

Contributors



Barret Kupelian Director, Chief Economist barret.g.kupelian@pwc.com



Adam Deasy Senior Associate, Economist adam.deasy@pwc.com



Sarah Brown

Director, Global

Corporate Affairs

Nabil Taleb Senior Associate, Economist nabil.taleb@pwc.com



Mehdi Sahneh Senior Manager, Economist mehdi.sahneh@pwc.com



Harry Ingham Associate, Economist harry.a.ingham@pwc.com



Simon Oates

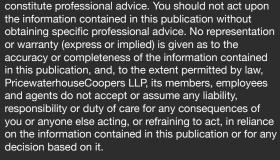
UK Economics Leader

Dr. Ilhan Guner Academic Advisor University of Kent



Director, Global Workforce





This publication has been prepared for general guidance on matters of interest only, and does not

© 2024 PwC. All rights reserved. Not for further distribution without the permission of PwC. 'PwC' refers to the network of member firms of PricewaterhouseCoopers International Limited (PwCIL), or, as the context requires, individual member firms of the PwC network. Each member firm is a separate legal entity and does not act as agent of PwCIL or any other member firm. PwCIL does not provide any services to clients. PwCIL is not responsible or liable for the acts or omissions of any of its member firms nor can it control the exercise of their professional judgment or bind them in any way. No member firm is responsible or liable for the acts or omissions of any other member firm nor can it control the exercise of another member firm's professional judgment or bind another member firm or PwCIL in any way.



Advisors



Tom Pagram Partner, Artificial Intelligence Leader & Chief Technology Officer. PwC Australia



Tom Lewis Partner, Head of Commercial Technology, PwC UK



Prasun Shah Partner, UK Tax Workforce, PwC UK



Mitra Best

Leader, PwC US

Julia Lamm

Partner, Workforce

Transformation, PwC US

Johan Jegerajan Partner, CEMEA and UK Consulting CTO, PwC UK

Partner, Technology Impact



Dr. Alexis Crowe Lead, Geopolitical Investing practice, PwC US

Euan Cameron

Leader. PwC UK

Anthony Bruce

Partner, Chair of Health

Industries, PwC UK

Partner, UK Artificial

Intelligence and Drones



Ashootosh Chand Partner, Digital & Emerging Technologies, PwC india



Maria Axente UK Responsible AI and AI for Good Lead, PwC UK



Evhab Abdeen Partner, Middle East Workforce, PwC Middle East



Rob McCargow Director, UK Technology Impact Leader, PwC UK

Eugénie Krijnsen

Services Advisorv

Partner, Global Financial

Leader.PwC Netherlands



Bastiaan Starink Partner, Workforce, PwC Netherlands



Ilana Golbin Blumenfeld Director, Emerging Technologies & Responsible AI Lead, PwC US



Calen Byers Partner, Financial Services -Asset & Wealth Management - Real Assets, PwC US



Paul Kett Senior Adviser and Global Director Education and Skills, PwC UK



Mir Kashifuddin Partner, Data Risk & Privacy Practice Leader, PwC US



Parul Munshi, Partner, Workforce Transformation PwC South East Asia Consulting, PwC Singapore



Patrick Pugh Partner, Principal, Global Microsoft Alliance and Transformation Leader, PwC US



Bhushan Sethi Partner, Strategy&, PwC US



Barbara Baarsma Chief Economist. **PwC Europe**





Amv Cai Managing Partner, ESG, PwC China



Jennifer Kosar Trust and Transparency Solutions Leader, PwC US







