

Firm Data on AI

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Motivation

- ▶ AI adoption is spreading quickly, but most evidence still comes from case studies or narrow technology samples.
 - * A lot of differences in survey design, survey timing, survey representativeness, and question wording. Result: Many different estimates of AI adoption and impacts in the literature.
- ▶ **This paper:** We combine data from four business surveys from the US, UK, Germany, and Australia to build comparable measures of AI adoption and realised/expected impacts on employment and productivity.
- ▶ The central contribution is **external validity:** large, representative surveys of senior executives using identical questions fielded between November 2025 and January 2026.

Main Findings

- ▶ **AI use is already broad.** Around 70% of firms currently use some AI technology; adoption is expected to rise to 75% over the next three years. Over 70% of survey respondents (mainly CEOs, CFOs) personally use AI.
- ▶ **Use is concentrated.** Adoption is higher at larger, more productive, and higher-paying firms, with younger firms and firms with younger directors also more likely to adopt.
- ▶ **Employment and productivity effects are modest so far.** Around 90% of firms report no impact of AI on employment or productivity over the past three years.
- ▶ **Firms expect larger future impacts.** Over the next three years, firms expect AI to boost productivity by 1.4% and reduce employment by 0.7%.
 - * In the US, firms expect AI to boost productivity by 2.3% and reduce employment by 1.2% over the next three years.
- ▶ **Executives and employees disagree.** Executives expect AI to reduce employment; employees expect it to create jobs.

Outline

- 1) Data
- 2) Firm AI Adoption
- 3) Personal AI Use
- 4) Impacts on Employment
- 5) Impacts on Productivity
- 6) Executives vs. Employees
- 7) Conclusion

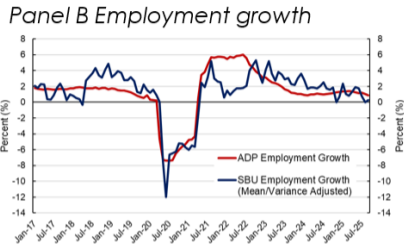
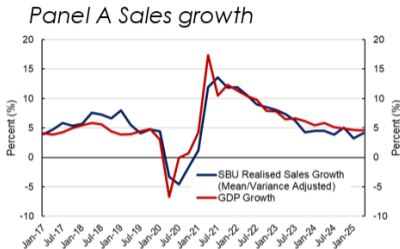
Data: Overview of the Four Surveys

- ▶ The paper pools four established business surveys, covering nearly 6,000 firms across four countries.
- ▶ All survey waves were fielded between November 2025 and January 2026, with identical question wording on AI use and impacts.

Survey	Country	Frequency	Coverage	Approx. AI wave size
Survey of Business Uncertainty (SBU)	US	Monthly	Representative firm panel	~1,000
Decision Maker Panel (DMP)	UK	Monthly	Representative firm panel	~2,500
Bundesbank Online Panel - Firms (BOP-F)	Germany	Quarterly	Representative firm panel	~2,500
Business Outlook Scenarios Survey (BOSS)	Australia	Monthly	Representative firm panel	602

Survey Data Track Aggregate Output and Employment

US Firms
(SBU)



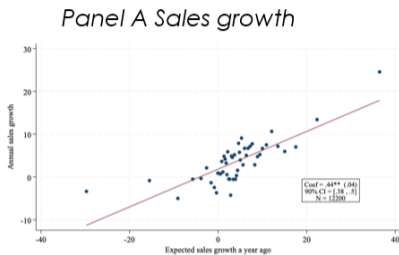
UK Firms
(DMP)



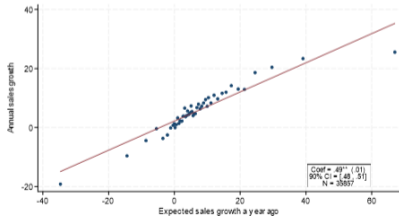
Sources: SBU; ADP; BEA; DMP; ONS; HMRS and authors' calculations. **Notes:** SBU sales data are compared to GDP growth from the BEA. SBU employment growth data are compared to ADP employment growth. DMP sales data are compared to whole economy nominal GDP growth at current market prices. DMP employment (for the private sector) is compared to ONS/HMRC data on the number of payrolled employees. DMP and SBU data are adjusted to match the mean and variance of growth in the corresponding ONS, HMRC, GDP, and ADP series over the time period shown on each chart.

Executive Forecasts Line Up Tightly with Realizations

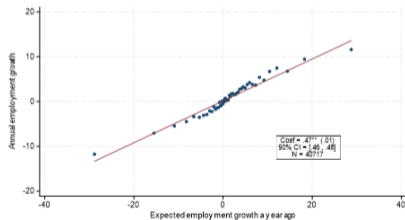
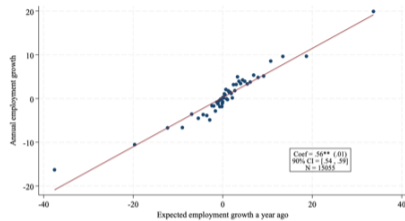
US Firms
(SBU)



UK Firms
(DMP)



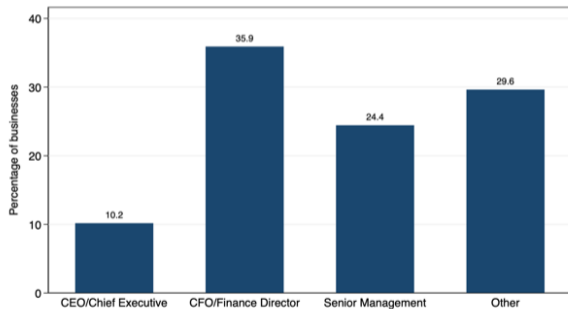
Panel B Employment growth



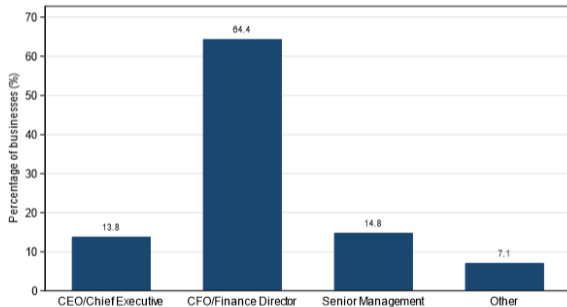
Notes: This figure shows binned scatter plots of the relationship between expected year-ahead sales growth and annual sales growth a year later at the firm level (Panel A) and expected year-ahead employment growth and annual employment growth a year later (Panel B). The sample from the SBU covers 2014-2025. The sample from the UK DMP covers 2017-2025.

Over 90% of UK Respondents and 70% of US Respondents Are Senior Executives

Panel A US Firms (SBU)



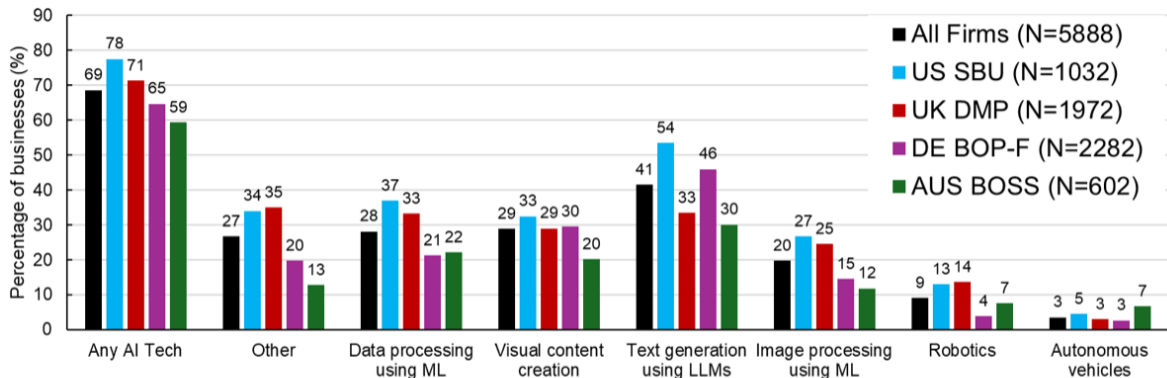
Panel B UK Firms (DMP)



Outline

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- 2) **Firm AI Adoption**
- 3) Personal AI Use
- 4) Impacts on Employment
- 5) Impacts on Productivity
- 6) Executives vs. Employees
- 7) Conclusion

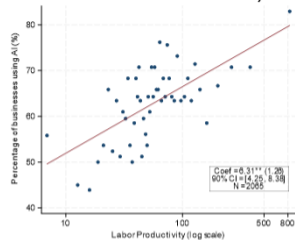
Around 70% of Firms Currently Use at Least 1 AI Technology By Industry



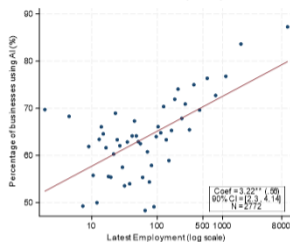
Notes: This figure is based on responses to the question: "Which of the following artificial intelligence technologies, if any, does your business currently use?" Firms could select more than one option. The data from the US Survey of Business Uncertainty was collected in November 2025. The data from the UK Decision Maker Panel was collected over November 2025 – January 2026. The data from the German Bundesbank Online Panel-Firms (BOP-F) was collected in January 2026. The data from the Australian Business Outlook Scenarios Survey was collected in December 2025. The data results from the SBU, DMP, and BOP-F are employment-weighted; the results from the BOSS are unweighted. The results for all firms is the average of the four surveys, weighted by the respective number of responses.

Larger, More Productive, and Higher-Paying Firms Adopt More

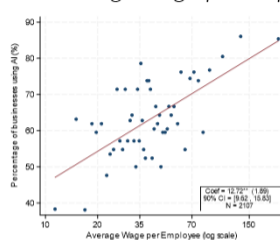
Panel A Labor Productivity



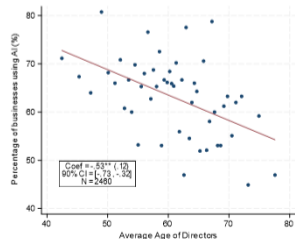
Panel B Firm employment



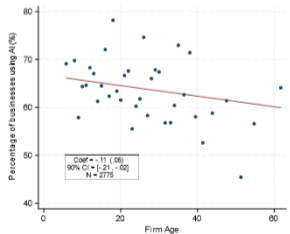
Panel C Average wage per employee



Panel D Average age of directors

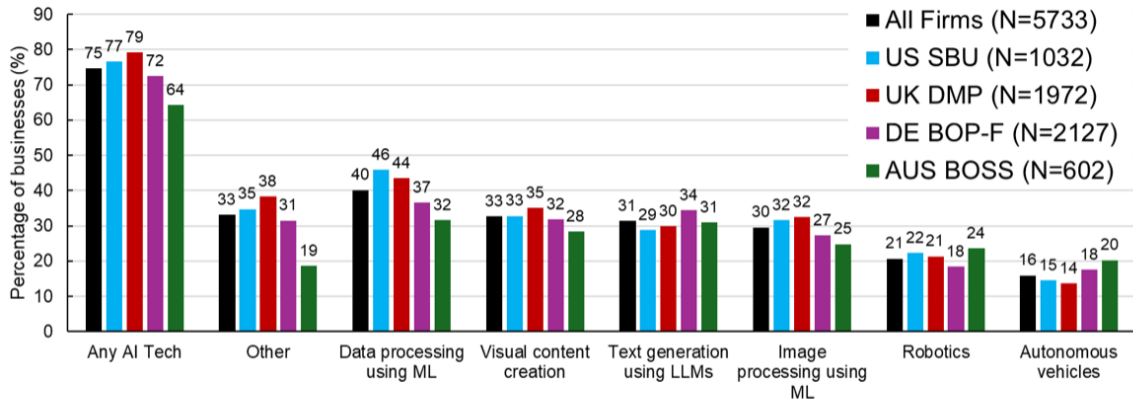


Panel E Firm age



Notes: This figure shows binned scatter plots. The vertical axis is the percentage of businesses currently using any AI technology. The data are from the UK Decision Maker Panel, collected over February-April 2025 and November 2025 – January 2026, with the latest firm observation used in the figures.

75% of Firms Expect to Use AI Within Three Years



Notes: This figure is based on responses to the question: "Which of the following artificial intelligence technologies, if any, does your business currently use? And which do you intend to make use of over the next three years?" Firms could select more than one option. The data from the US Survey of Business Uncertainty was collected in November 2025. The data from the UK Decision Maker Panel was collected over November 2025 – January 2026. The data from the German Bundesbank Online Panel – Firms (BOP-F) were collected in January 2026. The data from the Australian Business Outlook Scenarios Survey was collected in December 2025. The data results from the SBU, DMP, and BOP-F are employment-weighted; the results from the BOSS are unweighted. The results for all firms is the average of the four surveys, weighted by the respective number of responses.

Outline

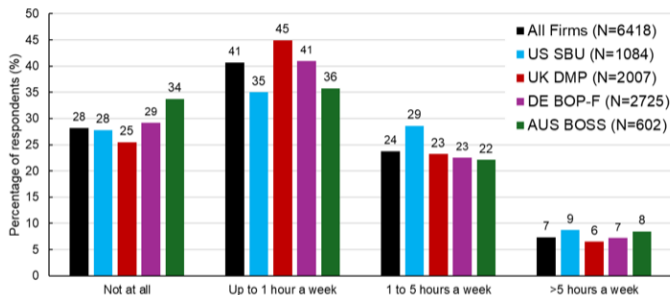
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Personal AI Use by Survey Respondent

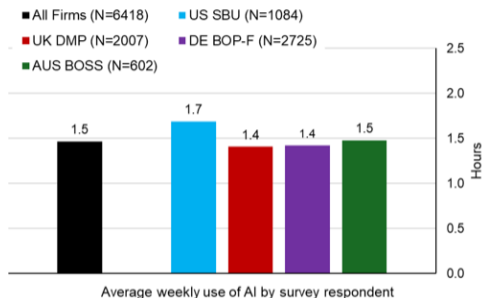
- ▶ The paper also asks senior executive respondents about their **own** use of AI during the typical working week.
- ▶ This provides a measure of individual-level AI intensity, complementing the firm-level adoption data.
- ▶ Over two-thirds of respondents themselves use AI technologies in the typical working week.
- ▶ CEOs are more likely to use AI during the workweek than CFOs and other senior executives, and AI use has increased sharply since early 2025.

Executives Use AI for About 1.5 Hours per Week

Panel A Distribution of responses



Panel B Average AI use per week



Notes: This figure is based on responses to the question: "On average, how frequently do you personally use artificial intelligence technologies in a typical working week?" The data from the US Survey of Business Uncertainty was collected in November 2025. The data from the UK Decision Maker Panel was collected over November 2025 – January 2026. The data from the Australian Business Outlook Scenarios Survey was collected in December 2025. The data from the German Bundesbank Online Panel – Firms (BOP-F) were collected in January 2026. The data results from the SBU, DMP, and BOP-F are employment-weighted; the results from the BOSS are unweighted. The results for all firms is the average of the four surveys, weighted by the respective number of responses. To calculate the average use per week (Panel B), values are assigned to each of the options in Panel A: 0 to "Not at all"; 0.5 to "up to 1 hour a week"; 3 to "1 to 5 hours a week"; 7.5 to ">5 hours a week".

Outline

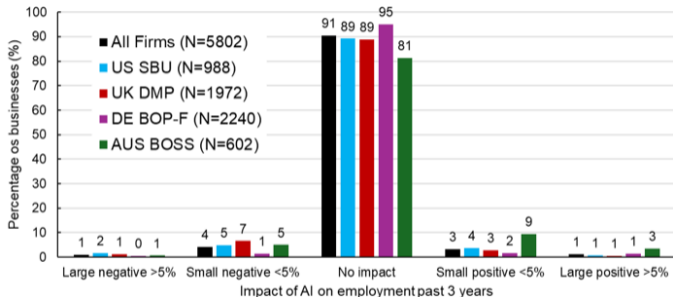
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Impacts on Employment: Overview of Approach

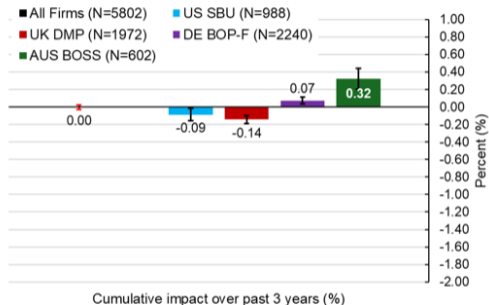
- ▶ Firms are asked how AI has affected their employment over the **past three years** and how they expect it to affect employment over the **next three years**.
- ▶ Responses use five categories from large negative (>5% decrease) to large positive (>5% increase).
- ▶ **Caveat:** The results are based on data from existing firms, so it captures the net effect of AI on employment at these firms but does not capture any job creation or destruction at new firms.

Over 90% of Firms Report No Employment Impact So Far

Panel A Distribution of responses



Panel B Average impacts

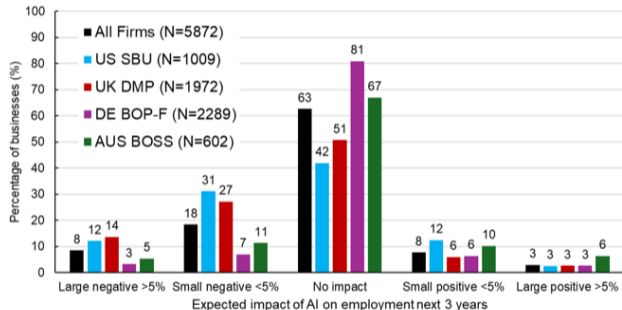


Notes: This figure is based on responses to the question: "How has the adoption of artificial intelligence technologies affected the number of employees in your business over the past three years?" The data from the US Survey of Business Uncertainty was collected in November 2025. The data from the UK Decision Maker Panel was collected over November 2025 – January 2026. The data from the German Bundesbank Online Panel-Firms (BOP-F) was collected in January 2026. The data from the Australian Business Outlook Scenarios Survey was collected in December 2025. The data results from the SBU, DMP, and BOP-F are employment-weighted; the results from the BOSS are unweighted. To calculate the average impacts (Panel B), values are assigned to each of the options in Panel A: large negative/large positive impacts are treated as $\pm 7.5\%$; small negative/small positive impacts are treated as $\pm 2.5\%$. The impact for all firms is the average of the impacts for the four surveys, weighted by the respective number of responses. 90% confidence intervals are shown for these impacts.

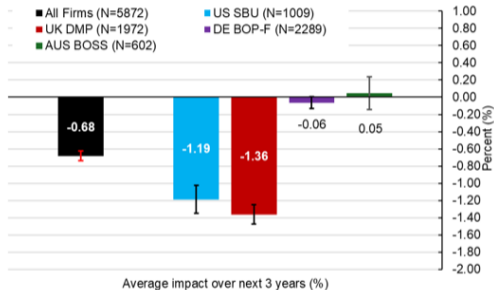
Firms Expect AI to Reduce Employment by 0.7% Over Next 3 Years

► By Industry

Panel A Distribution of responses



Panel B Average impacts



Notes: This figure is based on responses to the question: "How has the adoption of artificial intelligence technologies affected the number of employees in your business over the past three years? And how do you expect this to affect your number of employees over the next 3 years?" The data from the US Survey of Business Uncertainty was collected in November 2025. The data from the UK Decision Maker Panel was collected over November 2025 – January 2026. The data from the German Bundesbank Online Panel-Firms (BOP-F) was collected in January 2026. The data from the Australian Business Outlook Scenarios Survey was collected in December 2025. The data results from the SBU, DMP, and BOP-F are employment-weighted; the results from the BOSS are unweighted. To calculate the average impacts (Panel B), values are assigned to each of the options in Panel A: large negative/large positive impacts are treated as $\pm 7.5\%$; small negative/small positive impacts are treated as $\pm 2.5\%$. The impact for all firms is the average of the impacts for the four surveys, weighted by the respective number of responses. 90% confidence intervals are shown for these impacts.

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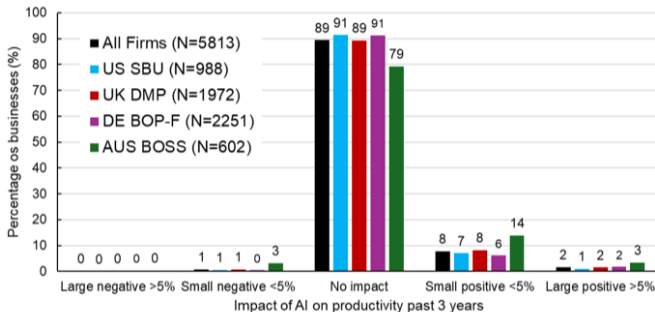
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Impacts on Productivity: Overview of Approach

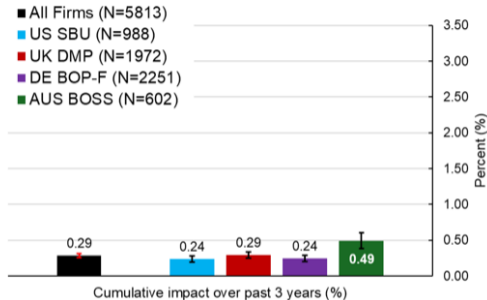
- ▶ The productivity analysis mirrors the employment section: realized effects over the past three years, expected effects over the next three years.
- ▶ Productivity is defined as the volume of sales per employee.
- ▶ The same five-category response structure is used (large negative to large positive).

Around 90% of Firms Report No Productivity Impact So Far

Panel A Distribution of responses



Panel B Average impacts

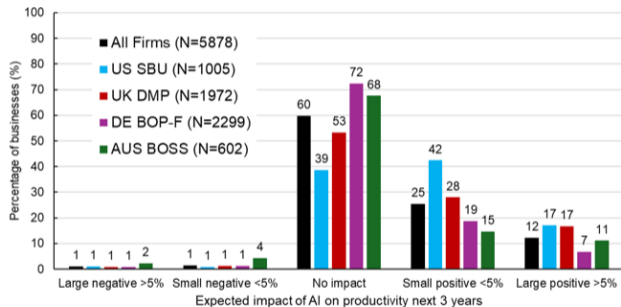


Notes: This figure is based on responses to the question: "How has the adoption of artificial intelligence technologies affected the volume of sales per employee in your business over the past three years?" The data from the US Survey of Business Uncertainty was collected in November 2025. The data from the UK Decision Maker Panel was collected over November 2025 – January 2026. The data from the German Bundesbank Online Panel-Firms (BOP-F) was collected in January 2026. The data from the Australian Business Outlook Scenarios Survey was collected in December 2025. The data results from the SBU, DMP, and BOP-F are employment-weighted; the results from the BOSS are unweighted. To calculate the average impacts (Panel B), values are assigned to each of the options in Panel A: large negative/large positive impacts are treated as $\pm 7.5\%$; small negative/small positive impacts are treated as $\pm 2.5\%$. The impact for all firms is the average of the impacts for the four surveys, weighted by the respective number of responses. 90% confidence intervals are shown for these impacts.

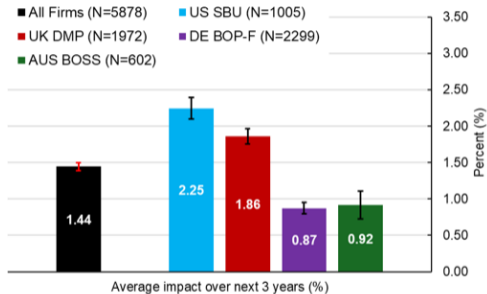
Firms Expect AI to Boost Productivity by 1.4% Over Next 3 Years

► By Industry

Panel A Distribution of responses



Panel B Average impacts



Notes: This figure is based on responses to the question: “How has the adoption of artificial intelligence technologies affected volume of sales per employee in your business over the past three years? And how do you expect this to affect your volume of sales per employee over the next 3 years?” The data from the US Survey of Business Uncertainty was collected in November 2025. The data from the UK Decision Maker Panel was collected over November 2025 – January 2026. The data from the German Bundesbank Online Panel-Firms (BOP-F) was collected in January 2026. The data from the Australian Business Outlook Scenarios Survey was collected in December 2025. The data results from the SBU, DMP, and BOP-F are employment-weighted; the results from the BOSS are unweighted. To calculate the average impacts (Panel B), values are assigned to each of the options in Panel A: large negative/large positive impacts are treated as $\pm 7.5\%$; small negative/small positive impacts are treated as $\pm 2.5\%$. The impact for all firms is the average of the impacts for the four surveys, weighted by the respective number of responses. 90% confidence intervals are shown for these impacts.

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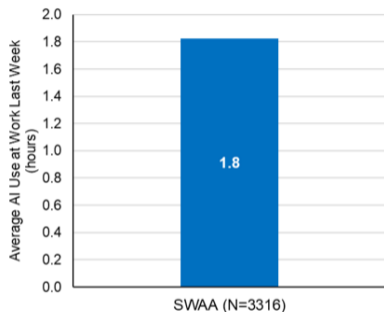
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Executives vs. Employees: Overview of Approach

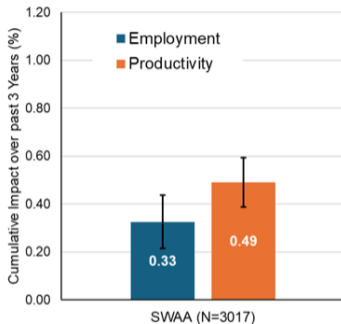
- ▶ The identical AI questions were asked to **employees** via the Survey of Working Arrangements and Attitudes (SWAA), a monthly US survey (~3,000 respondents).
- ▶ This allows a direct comparison of executive and employee perspectives on AI's impacts.
- ▶ Employees also report their own personal use of AI at work.

Executives Expect Job Losses; Employees Expect Job Creation

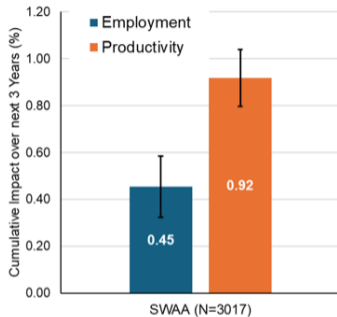
Panel A AI Use at work



Panel B Past 3 Years



Panel C Next 3 Years



Responses to the questions: You indicated that you sometimes use Generative AI for your job. Did you use Generative AI for your job LAST WEEK? Please think back to the days LAST WEEK on which you used Generative AI for your job. On average, how much time did you spend actively using Generative AI for your job How has the adoption of Artificial Intelligence technologies affected the NUMBER OF EMPLOYEES who work for your employer: over the past three years? over the next three years? How has the adoption of Artificial Intelligence technologies affected your employer's SALES PER WORKER (PRODUCTIVITY): over the past three years? over the next three years?

Notes: The sample includes respondents to the December 2025 SWAA wave who worked for pay during the week prior to the survey and pass our attention-check questions. In Panel A, we impute zero AI use for respondents who did not use it last week, or do not use it for their job. In Panels B and C, we restrict attention to wage and salary employees, (excluding self-employed workers and contractors). We reweight the raw responses to match the 2024 US population in cells defined by the cross product of age, sex, education and earnings.

Outline

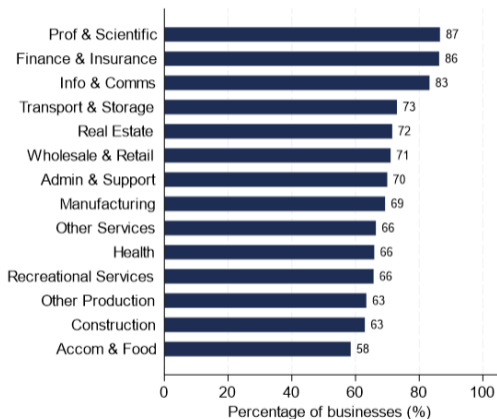
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Conclusion

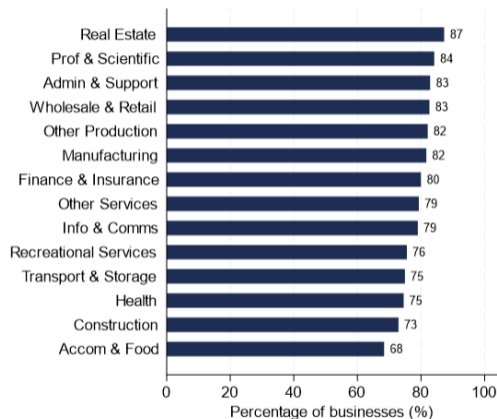
- ▶ AI use is already widespread (~70%), concentrated at larger and more productive firms. Over 70% of survey respondents (mainly CEOs, CFOs) personally use AI.
- ▶ Firms report little impact on employment or productivity so far but large expected effects over the next three years.
- ▶ Employees and executives disagree on the employment impact of AI: executives expect job losses, employees expect job creation.
- ▶ These national AI surveys will be run twice yearly from 2026 onwards to track the evolution of AI adoption and impacts over time.
- ▶ Explore the aggregated firm-level data on our website:
<https://www.firm-data-ai.com>.

Current and expected AI adoption by industry [Return](#)

Panel A Current AI Adoption



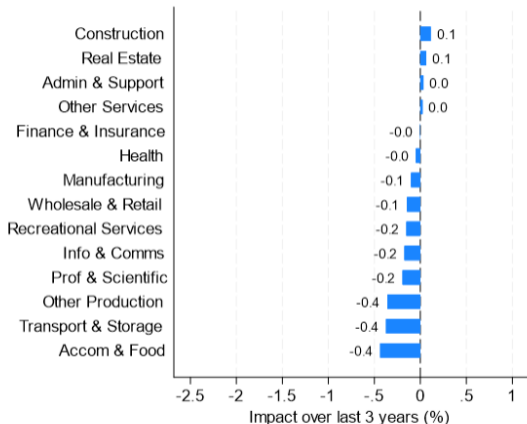
Panel B Expected Adoption Next 3 Years



Notes: This figure is based on responses to the question: "Which of the following artificial intelligence technologies, if any, does your business currently use? And which do you intend to make use of over the next three years?" The results are based on responses from the UK Decision Maker Panel, collected over November 2025 – January 2026. The results are employment-weighted.

Realised and expected employment impacts by industry [Return](#)

Panel A Past 3 Years



Source: Decision Maker Panel

Panel B Next 3 Years

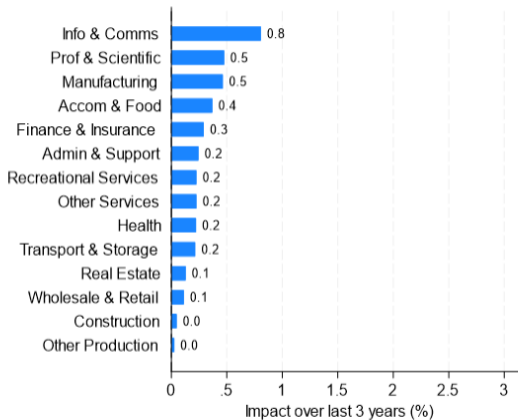


Source: Decision Maker Panel

Notes: The results are based on responses from the UK Decision Maker Panel, collected over November 2025 – January 2026. The results are employment-weighted.

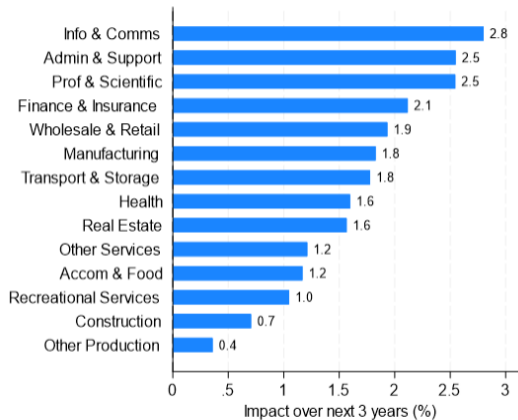
Realised and expected productivity impacts by industry [Return](#)

Panel A Past 3 Years



Source: Decision Maker Panel

Panel B Next 3 Years



Source: Decision Maker Panel

Notes: The results are based on responses from the UK Decision Maker Panel, collected over November 2025 – January 2026. The results are employment-weighted.