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Discussion

Who is using Gen-AI and what does it mean?

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HKMA-HKIMR-CEPR International Conference on GenAI

April 10, 2025

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What's the paper about?

Generative AI (Gen-AI) is rapidly expanding and profoundly influencing our daily lives and work.

1. **What are the demographic and geographic patterns of Gen-AI usage**
2. **What are the implications of these trends for technological and economic development?**

Methodology: analysis using internet traffic data from Semrush and Google trend.

Overall: smart, comprehensive, and policy-relevant analysis!

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Deepseek says a paper, titled “Who is using Gen-AI”, should cover

1. Who is Using Gen-AI?

- **Demographics**: Is Gen-AI usage concentrated among certain age groups, professions, or socioeconomic backgrounds?
- **Adoption Patterns**: Are early adopters primarily tech-savvy individuals, or is Gen-AI becoming mainstream?
- **Geographical Trends**: Is there a disparity in adoption between developed and developing regions?

Deepseek says a paper, titled “Who is using Gen-AI”, should cover (2)

2. Motivations for Using Gen-AI

- **Productivity vs. Creativity**: Are users leveraging Gen-AI for efficiency (e.g., automating tasks) or creative purposes (e.g., art, writing)?
- **Educational vs. Commercial Use**: How are students, researchers, and businesses utilizing these tools differently?

3. Implications of Gen-AI Adoption

- **Economic Impact**: Could widespread use disrupt job markets (e.g., content creation, customer service)?
- **Ethical Concerns**: Does reliance on Gen-AI raise issues like plagiarism, misinformation, or bias in outputs?
- **Behavioral Shifts**: How does frequent interaction with AI affect human cognition, creativity, and social dynamics?

Deepseek says a paper, titled “Who is using Gen-AI”, should cover (3)

4. Future Trends & Policy Considerations

- **Regulation Needs**: Should governments impose guidelines on AI usage in education, media, or workplaces?
- **Accessibility & Equity**: Will AI widen the digital divide if only certain groups benefit?

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Finding 1: The world is adopting Gen-AI at an unprecedented pace

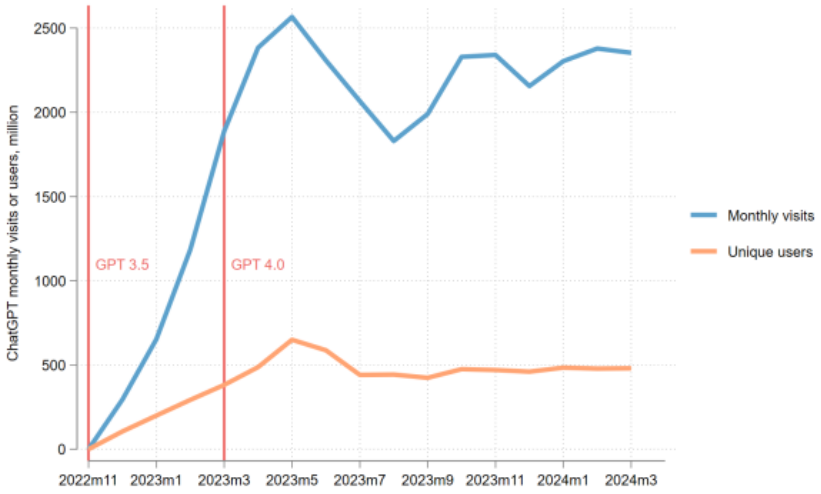

Figure 2: ChatGPT monthly visits and unique users

Chat GPT accounts for over 80% of the chatbot usage.

Comments:

1. There exists a large data gap regarding Gen-AI usage, particularly on Chinese AI tools.

2. Does this data gap exist for other languages as well?
   - Are there widely used Korean or Arabic AI tools that are not monitored by Semrush?

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Finding 2: Digital Divide in the use of Gen-AI

1. **Gender gap**: Young (60% under 35) male (67%) users dominated.
   - Differences in comparative advantage?
     - Fewer female workers in industries in which Gen-AI is more often used?
     - Is AI-related skills less accessible for women (due to, for instance, education choices)?

2. **Income gap**: High-income, developed economies, and those with better digital infrastructure and human capital have higher Gen-AI usage intensity

3. **Language gap**: English proficiency is strongly related to Gen-AI use

   - In an English-speaking country, having a higher share of English speakers is negatively related to Gen-AI usage (a Silicon-Valley phenomenon?)

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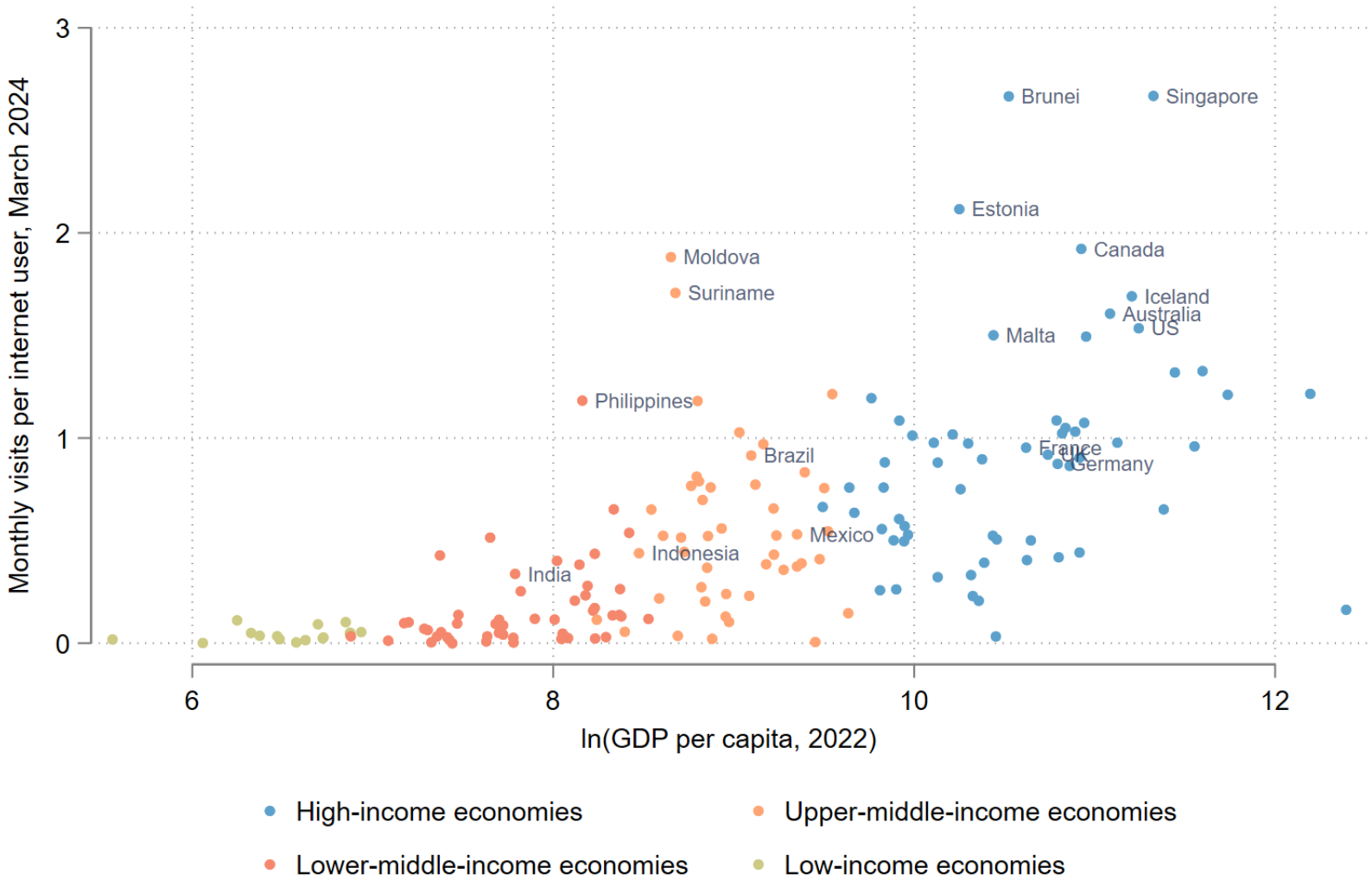
What's special about the high Gen-AI usage economies?



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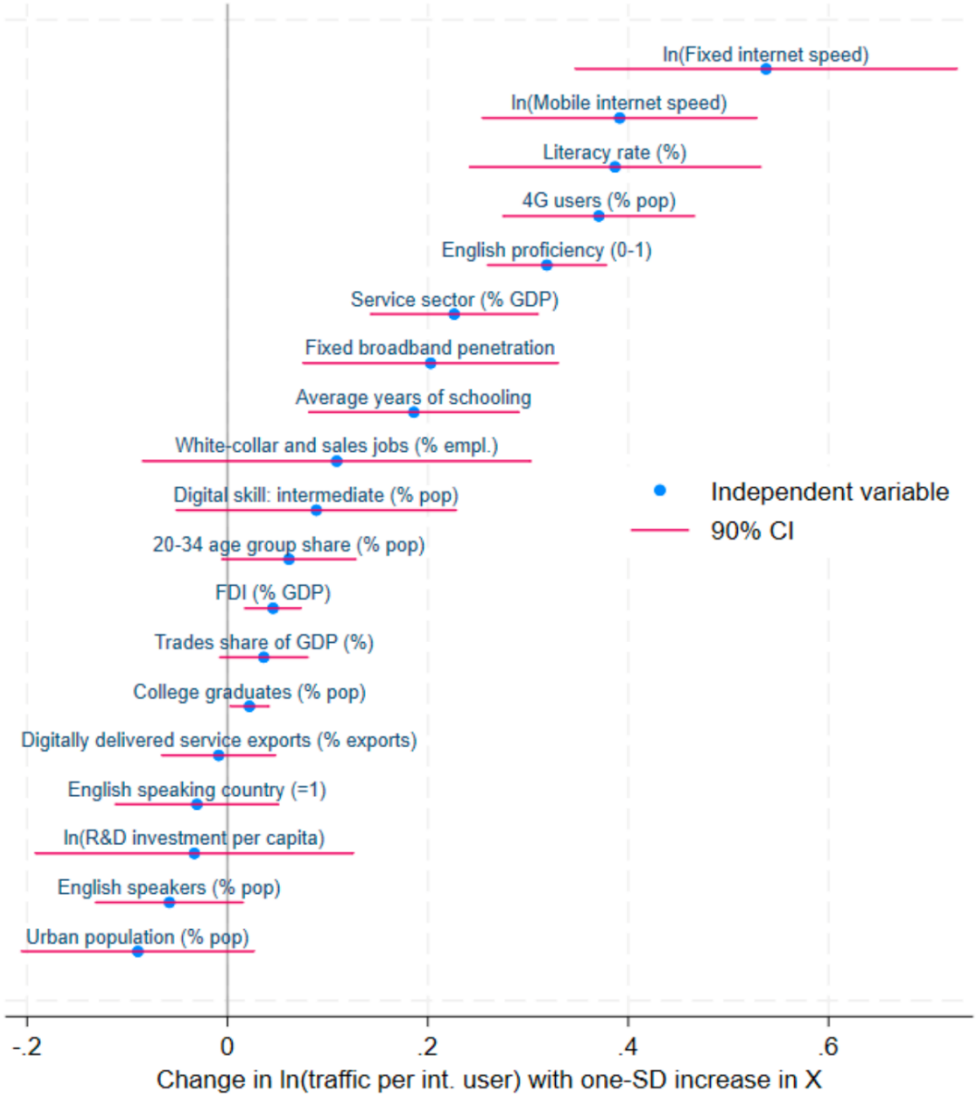
Finding 2: Digital Divide in the use of Gen-AI (cont')



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Finding 3: Purposes of using Gen-AI

Domain gap: While Gen-AI can assist with various tasks, this study suggests that AI is now predominantly used for work-related activities.

- This suggests that the impact of Gen-AI is less revolutionary in personal or leisure domains
- And would that be the next area, which AI developers will attempt to expand into?

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Finding 3: Purposes of using Gen-AI (çont')

1. Gen-AI is gradually replacing website like Google and Wikipedia as people's main information source.

   How will this impact the dissemination of information?

   - Ease of Access: People can get exact answers for their questions.
   - Verification concerns: AI-generated information is not always verified, and it usually provides just one answer, unlike most search engines.

2. Table shows the verbs impacted by Gen-AI usage, indicating the activities for which people need the most help from AI.

   - What does this mean for future AI and technology development?

Table 4: ChatGPT's selection of 30 verbs impacted by generative AI usage

Analyze	Assist	Automate	Build	Chat	Code
Compose	Control	Cook	Design	Detect	Diagnose
Drive	Edit	Guide	Invest	Learn	Navigate
Optimize	Plan	Play	Predict	Read	Recognize
Secure	Shop	Stream	Teach	Translate	Write

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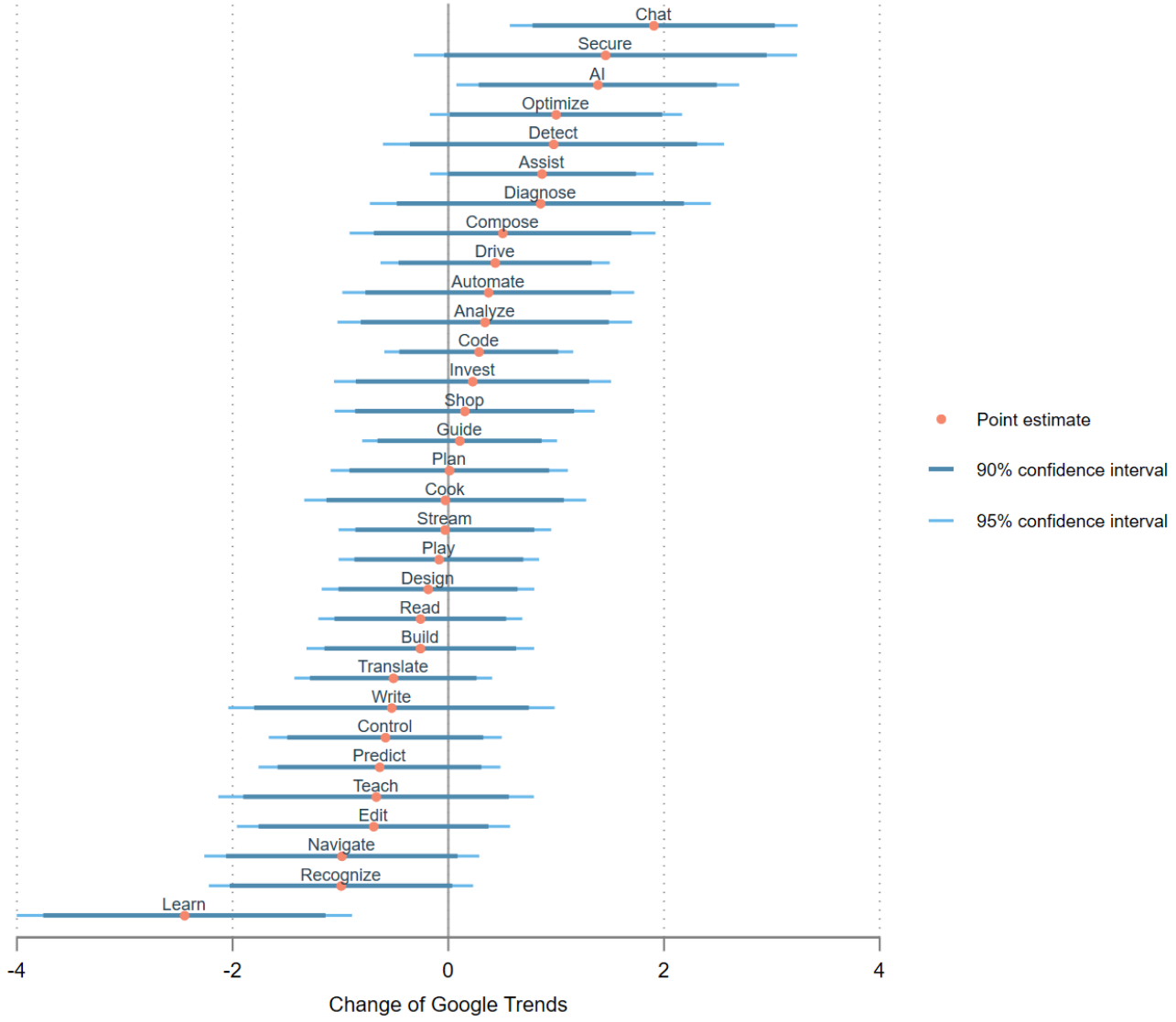
Negative impacts of ChatGPT on Google Trends



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Future research

1. What causes the usage gap in generative AI, how does access to Gen-AI and related skills vary across people and nations, and how will that influence inequality in technology, information, and productivity?

2. Implications for the future of jobs and education?

3. How has generative AI changed the way people behave on the internet and how they gather and process information?
   - AI governance? AI education?

4. How does the use of Gen-AI affect individuals, occupations, sectoral, and economies' productivity? Implications for fiscal and monetary policies?

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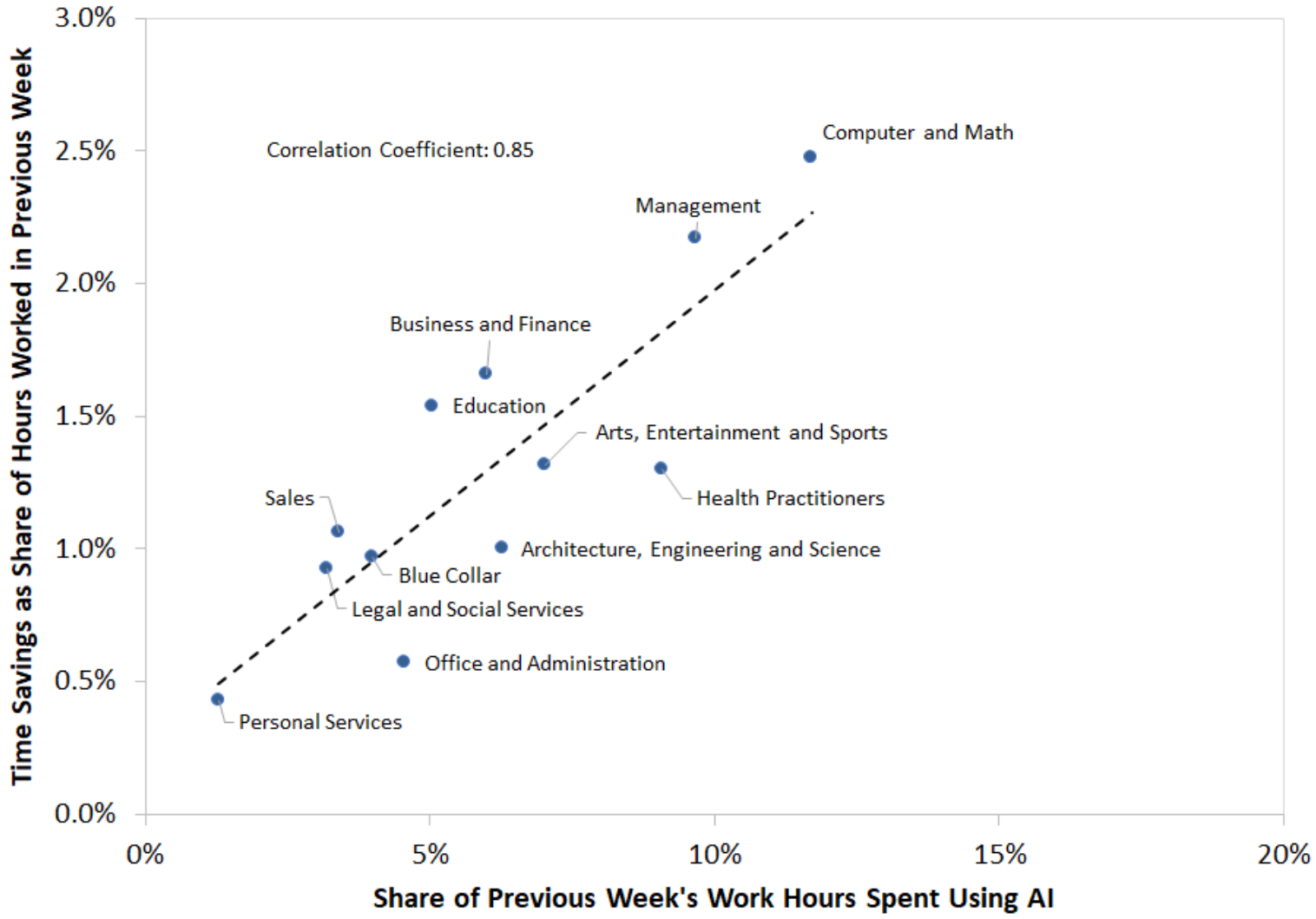
Productivity impact of using Gen-AI



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Heterogenous impact across industries

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- Thank You -