US Census Bureau Data on AI Adoption

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April 20, 2024

1 Context

Starting in September 2023, the US Census Bureau added two questions related to AI adoption in its biweekly Business Trends and Outlook Survey. AI, in this context, was defined as "computer systems and software that are able to perform tasks normally requiring human intelligence, such as decision making, visual perception, speech recognition, and language processing".

The first question asks whether in the last two weeks the responding business has used AI in producing goods and services. Examples of AI provided are machine learning, natural language processing, virtual agents, and voice recognition. The second question follows the first one by asking if in the next six months the business will be using AI in producing goods and services. Thus, collectively, these questions give good insight into adoption of a wide spectrum of AI technologies by US businesses.

2 Sample

The sample for the Business Outlook and Outlook survey is 1.2 million businesses drawn yearly from the Business Register. This survey covers all private non-farming companies and is representative at the national, state, and sector levels. These data are also collected for the 25 largest Metropolitan Statistical Areas of the country.

A survey panel of 200,000 businesses is contacted biweekly with an average response rate of 16% for AI related questions from around 164,500 businesses. Survey responses and non-response adjusted survey weights are used to create aggregate percentage responses to questions. All firm sizes are selected with equal probabilities, so this sample is equally representative of large, medium and small sized businesses.