

# Seizing Generative AI to Forecast Economic Trends

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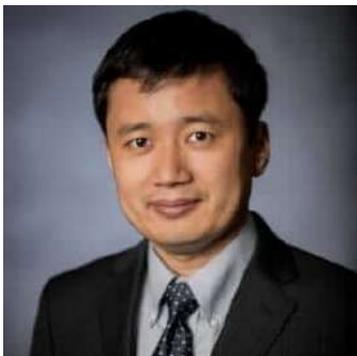


There is no science to business forecasting, no common set of expectations or tools. Handicapping football utilizes a more sophisticated process.

Usually the best you can hope for is to not be outrageously wrong. It's a low bar, and even then business forecasters rarely meet it. Or have you forgotten that recession that just didn't happen? At least we warned about the collapse of the housing market in 2008. Oh, right. We weren't.

This headline from a 2022 edition of the Harvard Business Review summed it up best. "Business Forecasts Are Reliably Wrong – Yet Still Valuable." "They are exercises of imagination, which studies have shown are rarely correct in their particulars," the article stated. "Despite being reliably incorrect, savvy leaders can find strategic value from forecasts."

But how much longer will "reliably wrong" be an acceptable benchmark, especially in these volatile times where economic survival requires knowing today what will happen tomorrow?



Baozhong Yang

Professor of finance at Georgia State's Robinson College of Business Baozhong Yang says part of the problem has been the costliness of conducting managerial surveys on such a large scale -- and doing so with the frequency necessary to adjust to market volatility.

"There's so much useful information available," said Yang. "The challenge has been organizing it all in a useful form."

Yang, along with Robinson professors Manish Jha and Jialin Qian and Michael Weber, from Chicago Booth and NBER, tackled this challenge in their recently released paper, "Harnessing Generative AI for Economic Insights." As the title



The researchers utilized AI to analyze transcripts from corporate conference calls and extract information on managers' expectations for various economic indicators, like GDP, production, employment and investment.

"Our idea was to convert conference calls into managerial qualitative data," Yang said. Using available technologies, they were able to collect a wide range of economic factors from inside the firms.

From this, they've created a new measure, the "AI Economy Score," which summarizes managerial forecasts for the economy. This score reflects future GDP and economic factors including industrial production and employment.

"AI-generated expectations can forecast economic trends at different levels and over long periods," according to the researchers. "Additionally, the study finds that managers' expectations have predictive power because managers have firsthand information and act on their beliefs, impacting the economy. Overall, this research demonstrates that AI can help provide valuable insights into economic trends, aiding researchers, policymakers, and investors."



Manish Jha

Yang said the score will be useful to several sectors. Low AI Economy scores portend a challenging economic environment with adverse market conditions that will make it tough to do business. High AI Economy scores reflect optimism, surging revenue growth and positive financial performance, say the researchers.

Yang said the topics discussed in these conference calls produce significant indicators. In gloomy economic conditions, you see firms acting cautiously. Optimism is on the wane.

But when the economy is on the upswing, discussions will generally center around discussions of sales growth, improving market conditions, organic revenue growth and overall positive business performance.



The transcripts were fed into a generative AI model programmed to give answers

regarding managerial expectations of the future state of the economy and the individual firms.

Data from more than 120,000 conference calls, representing 5,513 unique companies, was collected. The numbers were used to generate indicators at the national and industry-sector levels.

"We have the predictive power," Yang said. "We just haven't known how to use it effectively."

Another innovation: Separating data by industry, recognizing that some sectors may defy prevailing economic trends.

Yang foresees the AI Economic Score becoming accessible to the general public.

The ultimate goal is a better-informed customer or investor. Already existing technologies in forecasting, market analysis, policy simulation, and risk assessment can significantly aid stakeholders.

Maybe even advance from reliably wrong to reliable.

 JANUARY 14, 2025

# Seizing generative AI to forecast economic trends

by Holly Frew, Georgia State University



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**More information:** Manish Jha et al, Harnessing Generative AI for Economic Insights, *SSRN* (2024). DOI: [10.2139/ssrn.4976759](https://doi.org/10.2139/ssrn.4976759)

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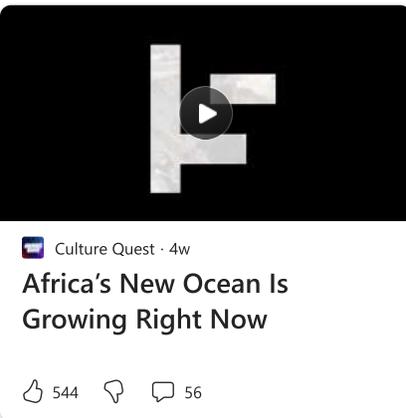
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# Trip to Ghana, drone, flights: South Fulton mayor made \$26,000 in unauthorized purchases

Story by Ashli Lincoln • 16h • 2 min read



Trip to Ghana, drone, flights: South Fulton mayor made \$26,000 in unauthorized purchases

South Fulton residents are questioning some of the things their mayor has purchased over the last few months, including a trip to Africa.

It's a trip to Africa South Fulton resident Reshard Snellings says he questions if it was on the city's dime.

Resident Reshard Snellings told **Channel 2 Investigative Reporter Ashli Lincoln** that the Mayor of South Fulton Khalid Kamau, who now goes by the name Mayor Kobi, documented his 20-day December trip to Ghana on Instagram.

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Snellings is questioning if that trip was on the city's dime.

"I wanted to find out if taxpayers paid for this trip," Reshard Snellings said. "We should not be asked to go without something so that our elected officials can travel all over the globe."

Bank records from a city-issued credit card show nearly \$26,000 spent between October and December on unauthorized travel, food and other expenses.

Lincoln asked Councilwoman Helen Z. Willis if South Fulton was doing any business in Africa.

"Not to my knowledge," Willis said. Lincoln

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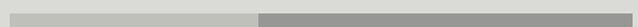
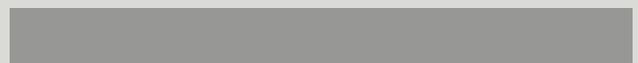


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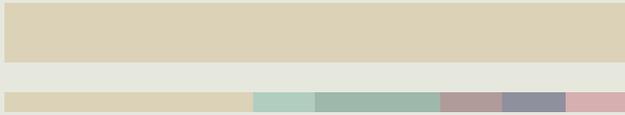
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