
ARTIFICIAL INTELLIGENCE MAY BE THE HOTTEST TOPIC OF EARLY 2023

Christopher Gannatti — Global Head of Research, Blake Heimann — Senior Associate, Quantitative Research
03/14/2023

Technology trends are not linear—they are exponential.

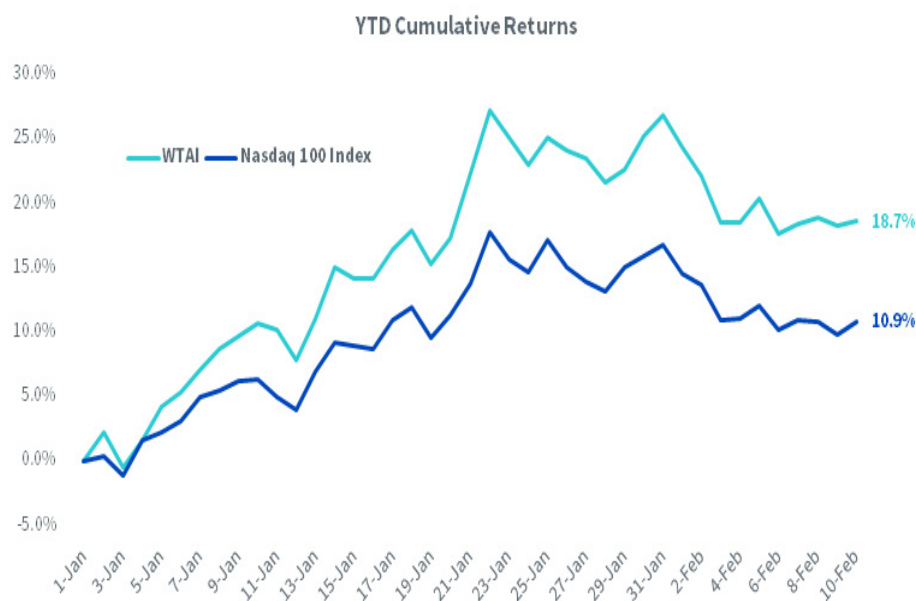
Exponential growth makes the path of adoption difficult to predict. A big topic like [artificial intelligence](#)—and accurately predicting exactly how ‘big’ the opportunity is—is a daunting task .

Take the current phenomenon that is ChatGPT. This application isn’t just popular—it is one of the fastest applications to get to 100 million downloads that we have ever seen. As a society, we’re still determining what ChatGPT actually is, but its virality is already off the charts.

The market for AI investments has responded in early 2023 with vigor.

WisdomTree designed the [WisdomTree Artificial Intelligence and Innovation Fund \(WTAI\)](#) to give investors the option of exposure across the AI ecosystem. [WTAI](#) has kicked 2023 off with a bang after a very difficult 2022 performance period.

Figure 1: WTAI Exhibited Dramatic Outperformance of the Nasdaq 100 Index in Early 2023



Total Return							
Ticker	Fund / Index Name	Inception	1MO	3MO	YTD	1Y	Since Common Inception (12/9/2021)
WTAI	WisdomTree Artificial Intelligence and Innovation Fund (NAV)	12/9/2021	1.45%	7.28%	18.15%	-18.87%	-32.74%
WAI	WisdomTree Artificial Intelligence and Innovation Index	11/9/2021	1.40%	7.38%	18.05%	-19.06%	-32.95%
NDX	Nasdaq 100 Index	1/31/1985	-0.49%	0.10%	10.08%	-15.42%	-25.43%

Sources: WisdomTree, Bloomberg, from 12/31/22-3/2/23. Total returns are calculated as of 2/28/23. Past performance is not indicative of future results. Performance of less than one year is cumulative. You cannot invest directly in an index. See the Fund's landing page for full standardized performance and month-end performance. Performance is historical and does not guarantee future results. Current performance may be lower or higher than quoted. Investment returns and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost.

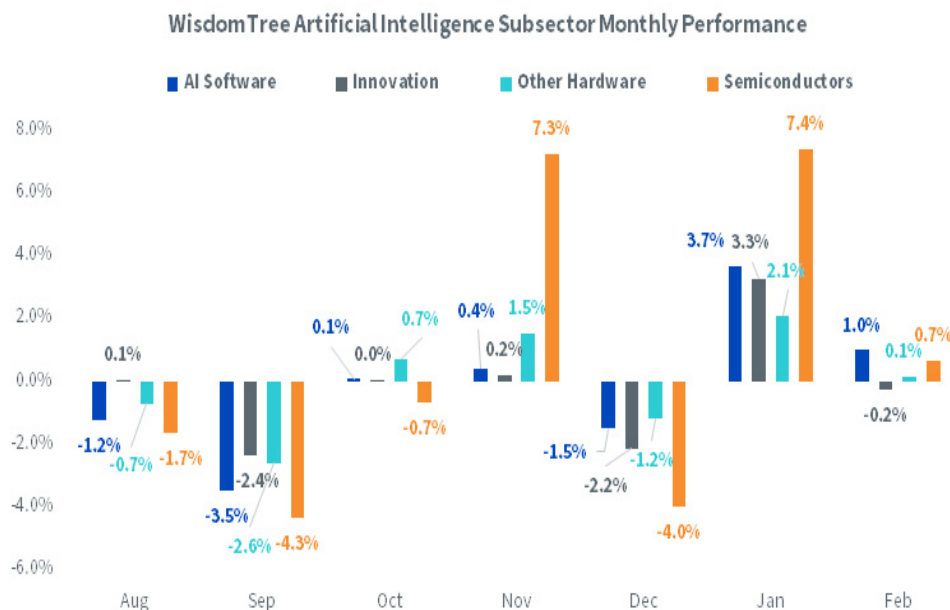
Performance data for the most recent month-end data is available [here](#).

Where Is the Impact of ChatGPT Showing Up in the AI Ecosystem?

ChatGPT gained attention in late November/early December 2022. [WTAI](#) is exposed across the ecosystem and not just to semiconductors or to software. Below we indicate what drove the change from the downturn in 2022 to more positive performance in 2023.

- August, September and October of 2022 were tough months.
- November 2022 showed a marked change, namely in [semiconductors](#) (semis); semis within [WTAI](#) exhibited divergent performance.
- December 2022 was another challenging month performance-wise, but then January 2023 kicked off with a bang. All four of our distinct subsectors were in positive territory. This hadn't happened for some time.
- February 2023 was clearly tougher—particularly at the end of the month—but we see that both AI software and semiconductors were still positive.

Figure 2: How the AI Ecosystem Responded to the ChatGPT Euphoria



Sources: WisdomTree, FactSet, 12/31/22–3/2/23. WisdomTree categorizes all potential constituents of WTAI into one of these four groups, as these represent how WisdomTree views the components of the AI ecosystem. Past performance is not indicative of future results.

The bottom line: Figure 2 illustrates AI is an ecosystem—not just software, not just a few companies. There are established players and new entrants. There are some of the biggest companies in the world, and there are small caps.

In [WTAI](#), we are looking to capitalize on the growing adoption of AI over the coming decades.

Incorporating Generative AI & Chat Bots

The year 2022 was a demarcation in the [initial public offerings \(IPOs\)](#) market. After a very strong 2021, when many companies ventured from the private to the public markets, 2022 saw a near standstill, with little activity.

So on March 1, 2023, the following headline tells us two things:

- Instacart, a widely recognized name in the delivery space, is in the process of readying itself to go public.
- Instacart is interested in tying itself into the frenzy of interest currently surrounding ChatGPT.

Instacart Joins ChatGPT Frenzy, Adding Chatbot to Grocery Shopping App¹

Far from being the only instance, a recent scan of news articles produces:

- *Microsoft Brings ChatGPT-Powered Bing to Mobile Devices²*
- *Facebook Parent, Snap Embrace AI Technology that Powers ChatGPT Chatbot³*

Companies are embracing this technology. In its first two months, ChatGPT generated 100 million users, and toward the end of February 2023, the tool was getting about 35 million visits per day—a similar figure as the Bing search engine.⁴

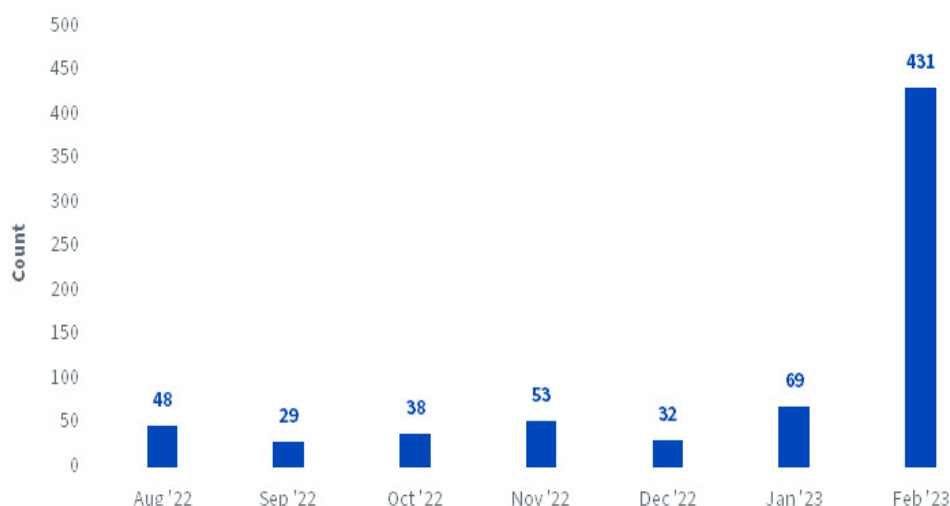
Jumping on the Bandwagon

There was a time where we would see various CEOs on their quarterly earnings calls mentioning AI. If a company is associated with data, they want to use the most cutting-edge tools to extract insights.

Data was, in effect, ‘the new oil’—a common phrase.

Figure 3 shows that mentions in February 2023 of ‘generative AI’ and ‘ChatGPT’ surged.

Figure 3: Earnings, Events & Documents Mentioning ‘Generative AI’ or ‘ChatGPT’



Sources: AIERA, WisdomTree.

AI Full Value Chain

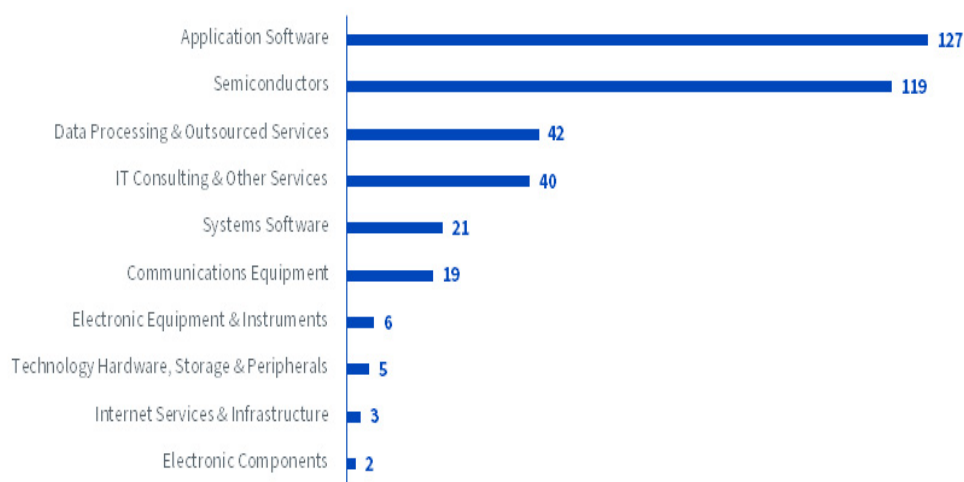
WisdomTree's work in AI focuses on the entire AI value chain.

Software, hardware: Some companies are directly building algorithms, while others are building sensors and processing power and other hardware that facilitates AI's functionality.

Innovative uses: Other companies are using AI at scale to improve services. We frequently think of Netflix's content platform for 200 million users making distinct recommendations of what to watch next...this cannot be done well with anything other than AI.

WisdomTree sees application software and semiconductors as the two most closely oriented subsectors to AI. These are the generators of algorithms and processing power. These subsectors have been particularly active in mentioning generative AI or ChatGPT.

Figure 4: Mentions of Generative AI or ChatGPT by GICS Sub Industry



Sources: AIERA, WisdomTree.

Conclusion

The macroeconomic environment is currently dominating market activity. However, investors clearly remain captivated by the AI secular growth story that ChatGPT has put in the spotlight. Thematic investing is largely about stories, and the story of ChatGPT so far has been a massive performance catalyst.

¹ Source: Angus Loten, "Instacart Joins ChatGPT Frenzy, Adding Chatbot To Grocery Shopping App," Wall Street Journal, 3/1/23.

² Source: Sarah E. Needleman, "Microsoft Brings ChatGPT-Powered Bing to Apple, Android Mobile Devices," Wall Street Journal, 2/22/23.

³ Source: Meghan Bobrowsky, "Facebook Parent, Snap Embrace AI Technology That Powers ChatGPT Chatbot," Wall Street Journal, 2/27/23.

⁴ Source: Laura Forman, "AI Has its 'iPhone Moment,'" Wall Street Journal, 3/2/23.

Important Risks Related to this Article

As of March 9, 2023, WTAI held 0%, 1.02% and 0% in Instacart, Microsoft and Facebook, respectively. Click [here](#) for a full list of Fund holdings. Holdings are subject to change.

There are risks associated with investing, including the possible loss of principal. The Fund invests in companies primarily involved in the investment theme of artificial intelligence (AI) and innovation. Companies engaged in AI typically face intense competition and potentially rapid product obsolescence. These companies are also heavily dependent on intellectual property rights and may be adversely affected by loss or impairment of those rights. Additionally, AI companies typically invest significant amounts of spending on research and development, and there is no guarantee that the products or services produced by these companies will be successful. Companies that are capitalizing on innovation and developing technologies to displace older technologies or create new markets may not be successful. The Fund invests in the securities included in, or representative of, its Index regardless of their investment merit and the Fund does not attempt to outperform its Index or take defensive positions in declining markets. The composition of the Index is governed by an Index Committee and the Index may not perform as intended. Please read the Fund's prospectus for specific details regarding the Fund's risk profile.

For the top 10 holdings of WTAI please visit the Fund's fund detail page at <https://www.wisdomtree.com/investments/etfs/megatrends/wtai>

For standardized performance and the most recent month-end performance click [here](#) NOTE, this material is intended for electronic use only. Individuals who intend to print and physically deliver to an investor must print the monthly performance report to accompany this blog.

Related Funds

- + [WisdomTree Artificial Intelligence and Innovation Fund](#)
- + [WisdomTree Cybersecurity Fund](#)
- + [WisdomTree Cloud Computing Fund](#)
- + [WisdomTree New Economy Real Estate Fund](#)

View the online version of this article [here](#).

IMPORTANT INFORMATION

U.S. investors only: Click [here](#) to obtain a WisdomTree ETF prospectus which contains investment objectives, risks, charges, expenses, and other information; read and consider carefully before investing.

There are risks involved with investing, including possible loss of principal. Foreign investing involves currency, political and economic risk. Funds focusing on a single country, sector and/or funds that emphasize investments in smaller companies may experience greater price volatility. Investments in emerging markets, currency, fixed income and alternative investments include additional risks. Please see prospectus for discussion of risks.

Past performance is not indicative of future results. This material contains the opinions of the author, which are subject to change, and should not to be considered or interpreted as a recommendation to participate in any particular trading strategy, or deemed to be an offer or sale of any investment product and it should not be relied on as such. There is no guarantee that any strategies discussed will work under all market conditions. This material represents an assessment of the market environment at a specific time and is not intended to be a forecast of future events or a guarantee of future results. This material should not be relied upon as research or investment advice regarding any security in particular. The user of this information assumes the entire risk of any use made of the information provided herein. Neither WisdomTree nor its affiliates, nor Foreside Fund Services, LLC, or its affiliates provide tax or legal advice. Investors seeking tax or legal advice should consult their tax or legal advisor. Unless expressly stated otherwise the opinions, interpretations or findings expressed herein do not necessarily represent the views of WisdomTree or any of its affiliates.

The MSCI information may only be used for your internal use, may not be reproduced or re-disseminated in any form and may not be used as a basis for or component of any financial instruments or products or indexes. None of the MSCI information is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Historical data and analysis should not be taken as an indication or guarantee of any future performance analysis, forecast or prediction. The MSCI information is provided on an "as is" basis and the user of this information assumes the entire risk of any use made of this information. MSCI, each of its affiliates and each entity involved in compiling, computing or creating any MSCI information (collectively, the "MSCI Parties") expressly disclaims all warranties. With respect to this information, in no event shall any MSCI Party have any liability for any direct, indirect, special, incidental, punitive, consequential (including loss profits) or any other damages (www.msci.com)

Jonathan Steinberg, Jeremy Schwartz, Rick Harper, Christopher Gannatti, Bradley Krom, Tripp Zimmerman, Michael Barrer, Anita Rausch, Kevin Flanagan, Brendan Loftus, Joseph Tenaglia, Jeff Weniger, Matt Wagner, Alejandro Saltiel, Ryan Krystopowicz, Jianing Wu, and Brian Manby are registered representatives of Foreside Fund Services, LLC.

WisdomTree Funds are distributed by Foreside Fund Services, LLC, in the U.S. only.

You cannot invest directly in an index.

DEFINITIONS

Artificial intelligence : machine analysis and decision-making.

Semiconductor : A semiconductor is a material product usually comprised of silicon, which conducts electricity more than an insulator, such as glass, but less than a pure conductor, such as copper or aluminum. Their conductivity and other properties can be altered with the introduction of impurities, called doping, to meet the specific needs of the electronic component in which it resides.

Initial public offering (IPO) : The first sale of stock by a private company to the public.