

## Al Adoption: Strong Signs of Recent Inflection Impacting Nasdaq CTA AI & Robotics<sup>™</sup> Index

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While there has been a lot of macroeconomic and fiscal policy noise so far in 2025, the leading secular growth driver for the broader equity market continues powering ahead. In fact, several recent surveys have been published indicating a meaningful inflection in Al usage, both in terms of breadth (adoption) and depth (frequency). First up was the below chart illustrating how the three leading AI model providers in the US -OpenAI (ChatGPT), Google (Gemini), and Meta Platforms (Meta AI) – have all seen monthly usage approach 40% across the entire US population (aged 16 and over), as of their most recent survey in March. After some recent impressive advancements in its model's capabilities, Google's Gemini has seen the most robust acceleration. As many analysts have been saying, though, we are still early with only about 1 in 7 Americans using these platforms on a daily basis. While OpenAl is still a private company, it remains in a deep financial, legal, and operational relationship with Microsoft (0.76% index weight as of June 27, 2025); Meta is a top 10 holding at a 1.81% weight, with Google's parent Alphabet at 0.73%.

ChatGPT/Gemini/Meta AI each now have ~40%/14% of Americans Exhibit 1: age 16+ using the products on a monthly/daily basis...with Gemini showing the largest growth over the past 6 months.



## Current Adoption of ChatGPT, Gemini, and Meta AI

Source: AlphaWise, Morgan Stanley Research; Note: the remaining portion of users not shown in the charts indicated that they "Do Not Use" the respective platform; Monthly basis refers to those who use the product several times a month or less frequently

An ongoing survey on AI usage in the workplace, conducted by Pew Charitable Trusts, showed similar results for ChatGPT & Gemini with ~40% usage in March/April 2025.

Ramp, a leading provider of credit card infrastructure, recently updated their own Ramp AI Index tracking adoption rates across U.S. businesses. In this example, their data also showed a similar acceleration in the all-important enterprise space: around 40% of US businesses with active, paid subscriptions to a model like ChatGPT (the clear leader, for now) or some other AI platform/tool.



Finally, Bloomberg also conducted its own Al usage survey in April showing a bit more granularity in the adoption rates between generative Al tools (the major all-purpose foundation models) vs. Al-enabled tools for more specific tasks, such as Microsoft's Copilot (office work assistant) and Github Copilot (coding assistant). Overall, they found that one-third of respondents reported using one or more of these tools in the last 3 months, outpacing usage stats for older productivity tools such as email/word processors/ spreadsheets, and rapidly gaining on the most popular social media tools. In both cases, older tools and platforms are clearly seen to be losing mindshare/wallet share, presumably to the direct benefit of Al tools/platforms.

The equity market's bellwether for the speed of AI adoption has been and continues to be Nvidia (0.82% of index weight), far and away the leading provider of chips designed to power AI training and, increasingly, AI inference workloads. Some analysts were upgrading their estimates heading into Nvidia's most recent earnings report on May 28, citing not only these broad indicators of accelerating AI adoption but also hard numbers around the exponential growth in token generation – in other words, the actual volume of inputs (text, image, etc) that users are feeding into these models, and the outputs that they're generating as a result. Nvidia confirmed that suspicion and then some, with CEO Jensen Huang saying, "AI inference token generation has surged tenfold in just one year, and as AI agents become mainstream, the demand for AI computing will accelerate." Their CFO added more color on the exponential jump in inference demand, saying that "OpenAI, Microsoft and Google are seeing a step-function leap in token generation. Microsoft alone processed over 100 trillion tokens in Q1, a 5x increase on a year-over-year basis." This represents a substantial evolution from how things looked at the beginning of the year, when inference – or reasoning – workloads were just beginning to signal the broad-based shift in how all these chips are being used. Less upfront compute to train models, more real-time processing compute.

The world is now fully transitioning from the prior stage of Generative AI to the Agentic stage, during which AI will be able to deliver knowledge-based services via AI "Agents" to complement, or in some cases completely supplant, human-based knowledge work (as Jensen Huang predicted earlier this year). Physical AI is not far behind, which will usher in the era of fully self-driving cars and AI-enabled robots, likely automating much of humanity's physical labor needs. The Nasdaq CTA AI & Robotics Index (NQROBO<sup>™</sup>) is designed to track the performance of companies classified as enablers, engagers, or enhancers in the fields of artificial intelligence and/or robotics.

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Where and how AI is used across the economy, drawn from real-world usage data from Claude.ai. The numbers refer to the percentage of conversations with Claude that were related to those individual tasks, occupations, and categories.

Al adoption is accelerating as the biggest models are getting more powerful, while a proliferation of model configurations now gives users an indication of the variety of use cases at their disposal. OpenAl recently began publishing a guide for its ChatGPT Enterprise offering to help users decide when to use a model like GPT-4o for everyday tasks, vs. GPT-4.5 for creative tasks, OpenAl o4-mini for fast technical tasks, or even OpenAl o3/o1 pro mode for complex/multi-step tasks that involve a high level of reasoning. Al usage indexes like <u>Anthropic's Economic Index</u> have been pointing to Computer & Mathematical as the frontrunner in terms

of both the job titles and job tasks most frequently associated with their model's workloads, which makes intuitive sense given the clarity of what qualifies as a "right" vs. "wrong" answer in those domains. But as the recent survey data strongly suggest, Al usage is now accelerating into other domains – a natural progression given broadening recognition of its growing abilities to add value across nearly every slice of the modern economy.

Perhaps investors are beginning to take notice once again. After a few months of macroeonomic and fiscal policy noise driving the narrative in equity markets – triggering drawdowns of ~23-26% apiece in the Nasdaq-100® (NDX®) and NQROBO – AI has been leading the recovery. Since the lows on April 8, 2025, the Nasdaq-100 has rebounded by ~32% thru June 27, while the Nasdaq CTA AI & Robotics Index has outperformed with a ~34% surge. The US equity market, as tracked by the S&P 500 Index (SPX), was up only ~24% in that timeframe; broader developed markets, as tracked by the Nasdaq Developed Markets<sup>™</sup> Index (NQDM<sup>™</sup>), were also up ~24%.



Source: Nasdaq Global Indexes, Bloomberg. Data as of June 16, 2025.

ETFs currently tracking NQROBO include the First Trust Nasdaq Artificial Intelligence and Robotics ETF (Nasdaq: ROBT / Germany: ROBT), and the Cathay Nasdaq AI & Robotics ETF (Taiwan: 00737)

Sources: Nasdaq Global Indexes, Bloomberg, Ramp, Morgan Stanley Research, Anthropic, Nvidia.

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