

## THNQ Index 2Q24 Index Commentary

June 30, 2024

During 2Q 2024, the **ROBO Global Artificial Intelligence Index (THNQ)** saw a +2.6% return, roughly in-line with the **Vettafi Full World Index (VFWI)** return of +2.87%, with 6 of the 11 subsectors in the positive, led by performances in the **Semiconductor (+16%)**, **Network & Security (+12.6%)**, **Consumer (+13.7%)**, and **Cloud Providers (+5.2%)** subsectors. Offsetting performance came from declines in **Big Data / Analytics (-1.61%)**, **Ecommerce (-5.92%)**, **Business Process (-7.16%)** and **Healthcare (-31.61%)** subsectors.

The AI race is intensifying, with even market leaders at risk if they fail to adapt. AI technology is progressing rapidly. For example, we now have “text-to-app” capabilities emerging which utilize LLM’s for contextual understanding, coding and debugging. In the LLM space, THNQ member **Microsoft**-backed OpenAI faces stiff competition from THNQ index members like **Alibaba** (QWEN2) and **Alphabet** (Gemma 2), which are topping leaderboards. Speaking of Alphabet, their Waymo One autonomous ride hailing launched in San Francisco to the public – heralding the start to an era where autonomous vehicles more resemble an extension of “public transit”. While megacaps dominated Q2 2024, their valuations largely reflect future “AI potential” and discounts competitive and regulatory dynamics.

Of course, AI extends beyond any single company, as reflected in the THNQ index’s diverse composition. Emerging “human-first” regulations are reshaping AI implementation across industries, contributing to a market tipping point where the THNQ index may offer a more balanced approach to AI exposure compared to individual tech giants facing increasing technical and regulatory risks.

While **NVIDIA (+36.7%)** has remained the “spice of AI”, referencing Frank Herbert’s Dune, the key differences are that unlike the spice in Dune, NVIDIA is dependent on a web of underlying technologies and enablers in the **Semiconductor** subsector like **Lam Research (+9.7%)**, **ASML (+5.6%)**, **Taiwan Semiconductor (+22.7%)**, and **Analog Devices (+15.7%)**, and that the largest buyers (hyperscalers) were not able to create their own and there was no competitive substitutes like **Qualcomm (+18.0%)** or **Global Unichip (+30.3%)**.

Meanwhile, high expectations led to some declines among companies that had overall solid earnings numbers and forecasts. The THNQ Index saw 92% of companies beat EPS estimates with an average surprise of +17.65% and 66.5% Y/Y weighted average growth (WAG), while 85.8% beat Sales estimates with an average surprise of +1.56% and 12.82% WAG. Importantly, 2024 and 2025 revisions have been guided upwards overall on a WAG basis. (Factset & Vettafi Data, as of June 28, 2024)

**Network and Security**, a core subsector of AI that we believe is even still an underappreciated long-term winner of AI, saw **Darktrace (+32.09%)** acquired by private equity fund Thoma Bravo for around \$5 Billion USD. Meanwhile, **Pure Storage (+23.50%)** and **Arista Networks (+20.86%)** continue to climb together as enablers of AI storage and data center networking. Cybersecurity leaders **CrowdStrike (+19.5%)** and **Palo Alto Networks (+19.3%)** continue to show value in protecting the increasingly digitally automated and reliant landscape with new AI offerings. On the other hand, the market questioned **Snowflake’s (-16.4%)** future as their

revenue growth slowed slightly and their forward guidance was conservative, but we believe their technology and market positioning remain solid as AI takes off and their product release cadence, as well as end-market demand, skyrockets.

The **Business Process** subsector saw some pre-summer cooling off, as we saw some pressure on both B2B and B2C fronts with **Salesforce** (-14.6%), **Samsara** (-10.8%) and **Nice Ltd** (-36.8%; removed from Index at Rebalance) in the red while **Fair Isaac Corporation** (+19.1%) and **Adobe** (+10.1%) saw gains. Ultimately – we are seeing strong product updates and innovation across all these companies and maintain conviction in these companies continuing to gain share in key industries and processes across the globe. **Costar** (-23.5%), a leading provider of online real estate marketplaces, information and analytics, acquired Matterport, a 3D visualization technology company that has captured over 38 billion square feet of property data globally, for \$1.6 billion enterprise value, further cementing Costars dominance in digital real estate technology.

Our approach continues to be monitoring the Artificial Intelligence landscape and finding underlying technologies that enable the "body of artificial intelligence" to exist and thrive in the real world. Our latest rebalance saw three additions: **CyberArk**, specializing in zero-trust identity management for machines, applications, and IoT - crucial in an AI-driven world of complex machine interactions; **Elastic N.V.**, joining for its real-time search and observability capabilities, addressing the growing need for sophisticated data processing in AI systems; and **Nutanix Inc.**, offering seamless AI application deployment across hybrid multicloud environments. These companies represent further enabling technologies that allow AI to thrive in real-world applications.

### **Top Contributors (Return / Contribution)**

#### **NVIDIA +36.7% / +1.01%**

Nvidia continues to draw both revenue and earnings growth and optimistic long-term expectations from the markets as the premier provider of AI chips and related technologies. Demand for NVIDIA GPU's across the globe continues to grow as data-center investment game theory story continues to play out. NVIDIA remains the most expensive on a Forward EV/Sales basis of 24.8x, more than 2.5x the index average.

#### **Darktrace +32.09% / +0.64%**

Darktrace, a leader in zero-trust, autonomous response cybersecurity, was acquired by Thoma Bravo for \$5.3 billion, which represented a 20% premium to the last closing price at around 34x adjusted EBITDA for year-end 2023. Darktrace has been subsequently taken out of the THNQ Index.

#### **Teradyne +31.51% / +0.58%**

Teradyne, which provides automated semi and wireless testing as well as industrial automation and collaborative robotic solutions through their Mobile Industrial Robots (MiR) and Universal Robot divisions, continues to see current strength in their larger testing division which is tied to the increase in high-end AI chips.

**Bottom Contributors (Return / Contribution)****Ginkgo Bioworks -71.2% / -1.42%**

Ginkgo Bioworks provides AI-driven automation for cell engineering R&D, aiming to "make biology easier to engineer." They offer platform services enabling customers to bring products to market, earning through fees and downstream value shares like milestones, royalties, or equity. Facing revenue pressures, they shifted to frontloading contracts and restructured the business, including layoffs. Despite this, Ginkgo forecasts 24% annual growth over the next three years. Now trading at second lowest Forward EV/Sales in the index at 0.5x right behind JD.com at 0.2x

**NICE Limited -36.8% / -0.53%**

NICE Ltd. saw underperformance and poor earnings sentiment and was ultimately removed from the Index due to threats to their core business and technology model. These threats include end-market consolidation and customers increasingly adopting newer generative AI technologies in-house.

**Veeva Systems Inc. -21.01% / -0.42%**

Veeva Systems, a cloud-computing company serving the life sciences industry, has underperformed in 2024 despite a strong Q1 2025 earnings beat. The company slightly lowered its full-year guidance to \$2.71 billion from \$2.74 billion, attributing the adjustment to macroeconomic challenges and foreign exchange headwinds. Veeva is transitioning off Salesforce onto their own core platform, introducing uncertainty but also potential for significant economic upside as they gain more control over their infrastructure and innovation capabilities.

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