J.P.Morgan

US TMT Specialist Commentary
Internet · Software · Media & Telecom

JPM TECH SKETCH: META Zuckerberg Goes Nuclear, TSLA Unsupervised Robotaxi this Summer?, APP -3% on Northbeam Data – Again, DUOL Monthly Report Card

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SCHILSKY'S SNAPSHOT

- META Zuckerberg Goes Nuclear (re: OKLO, VST): How high are your 2026 opex expectations? …META signed >6GW of power agreements yesterday: The WSJ. & VST 2.6 GW Press Release | OKLO 1.2GW Press Release

-TSLA Needs ~10B Miles of Training Data (re: UBER/LYFT): To achieve 'safe' unsupervised self-driving. At the current run-rate, that puts the new timeline for an unsupervised self-driving launch this summer (July?). Elon tweet

-APP -3% on Northbeam Data - Again: Please stop trading Northbeam data. It's quite noisy. Store Leads is much better. Wells also had a preview note out that I believe showed a below Street guide for Q1 revenue. *Spoiler Alert* They are going to guide Q126 Revenue up +3% to +5% Q/Q, per usual.

- DUOL Monthly Report Card – DAUs Tracking In-Line: From Bryan's DUOL Monthly Report Card – DAUs Tracking In-Line: "Key recent discussion areas w/investors include: 1) 4Q Bookings are tracking above consensus, per 3P data sources, even as DUOL prioritizes user growth & efficacy improvements; 2) Sensor Tower DAU data suggests 4Q global DAU growth of +31% Y/Y (vs. +41% Y/Y in 3Q), w/trends softer in December partially driven by less favorable Y/Y comps. Absolute global DAU data & absolute UCAN DAUs both grew +2% Q/Q in 4Q…Investors Expecting ~20% 2026 Bookings Growth Guidance at the Midpoint."

- JPM Research: DUOL Monthly Report Card – DAUs Tracking In-Line | OMC/PUB.FP/WPP.LN Q425 New Business Review | DKNG/FLUT Maine on the Cusp of Legalizing iGaming | ANGI Thoughts on RIF | CRWD to Acquire SGNL to Extend Dynamic Identity Reach | VEEV/DOCS/PEGA/CRZE/CSGP Vertical SaaS & HealthTech Weekly | ADSK/BSY/PCOR Vertical Voices & Buyer Insights

- JPM Events: Tech Spec Sales 2026 Outlook & Top Picks Webinar *TODAY* at 9AM EST w/Mark Schilsky, Josh Meyers, Scott Silver & Duncan Wagner **REGISTER HERE**

PTRN CEO & CFO NDR with Doug Anmuth in NYC Thursday January 15th Request a spot with your JPM Salesperson

JPM Global Tech, Media & Comms Conference in Boston - Registration is ***NOW OPEN***May 18-20 **REGISTER HERE**

NEWS – DESK COLOR – RESEARCH HIGHLIGHTS

META Zuckerberg Goes Nuclear (re: OKLO, VST):

How high are your 2026 opex expectations? **…META signed >6GW of power agreements yesterday**. From The WSJ: "Meta Platforms on Friday unveiled a series of agreements that would make it an anchor customer for new and existing nuclear power in the U.S., where it needs city-size amounts of electricity for its artificial-intelligence data centers. The Facebook parent said it would back new reactor projects with the developers **TerraPower and Oklo and has struck a deal with the power producer Vistra** to purchase and expand the generation output of three existing nuclear plants in Ohio and Pennsylvania. Financial details weren't disclosed, but the arrangements are among the most-sweeping and ambitious so far between tech companies and nuclear-power providers. Meta aims to see the first new reactors delivered as early as 2030 and 2032, a speedy target even for more-conventional power projects. Its purchase of nuclear power from Vistra starts later this year and will keep power on the grid."

"Under its agreement with TerraPower, the reactor developer backed by Bill Gates, Meta would pay to help accelerate the development of two reactors that could generate up to **690 megawatts of capacity**—or enough to power a midsize city—by 2032. Another six units could follow by 2035, Meta said."

"With Oklo, the Meta funding would help kick-start the development of a nuclear campus in Ohio. Oklo said Meta's prepayments for power would be used to secure nuclear fuel and advance the first phase of the project, which could eventually grow to about **1,200 megawatts of capacity**, about what a large reactor generates."

"Vistra, for its part, said it would start planning for federal license extensions at the Perry and Davis-Besse plants in Ohio and the Beaver Valley plant in Pennsylvania. A 20-year agreement with Meta includes **2,176 megawatts** of operating capacity from the reactors in Ohio and an **additional 433 megawatts** of generation-output increases, known as uprates, across all three locations."

VST 2.6 GW Press Release | OKLO 1.2GW Press Release

TSLA Needs ~10B Miles of Training Data (re: UBER/LYFT):

To achieve 'safe' unsupervised self-driving. At the current run-rate, **that puts the new timeline for an unsupervised self-driving launch this summer (July?).** From an Elon tweet:

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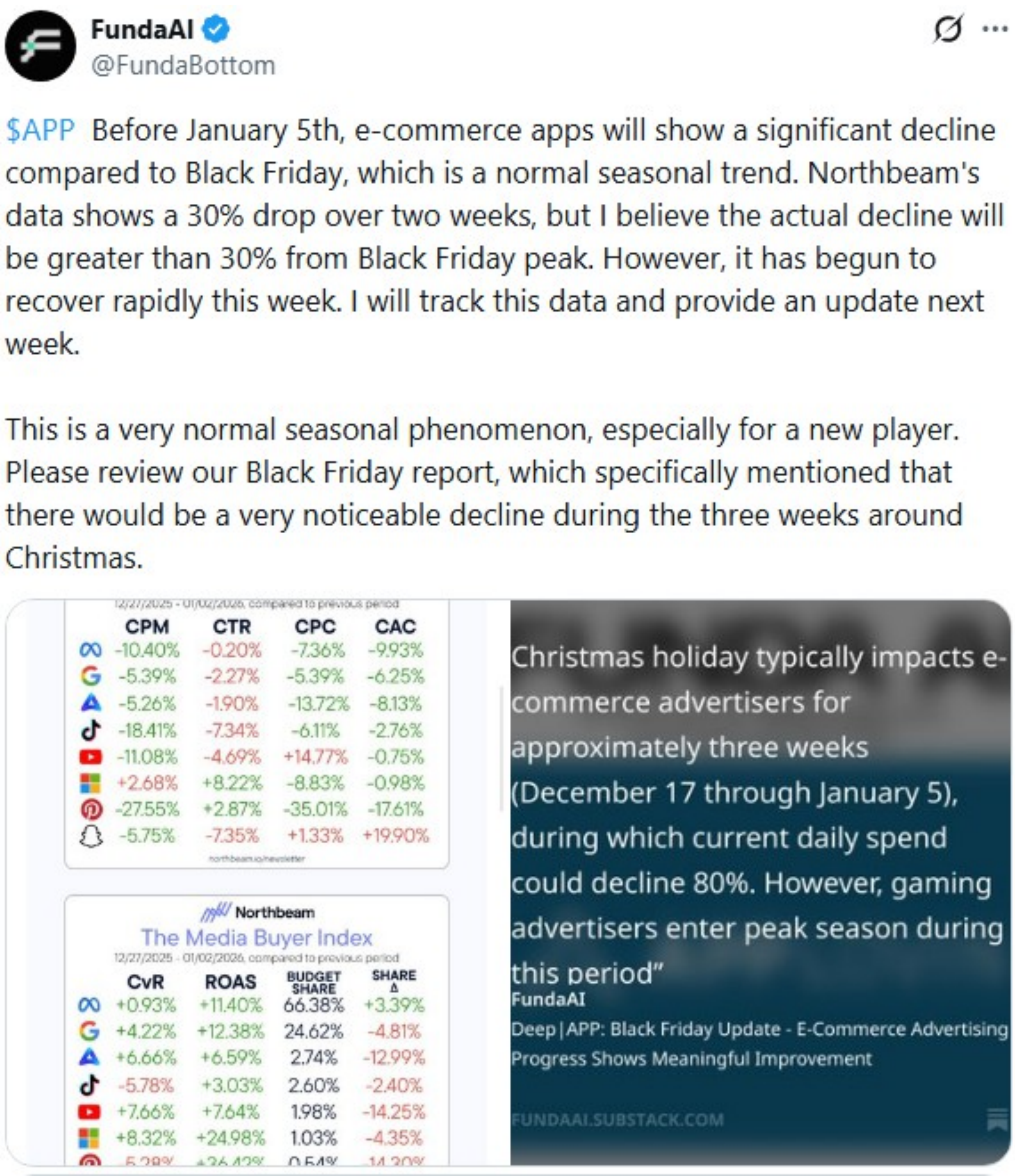
FundaAI gets it:



FundaAI
@FundaBottom

$APP Before January 5th, e-commerce apps will show a significant decline compared to Black Friday, which is a normal seasonal trend. Northbeam's data shows a 30% drop over two weeks, but I believe the actual decline will be greater than 30% from Black Friday peak. However, it has begun to recover rapidly this week. I will track this data and provide an update next week.

This is a very normal seasonal phenomenon, especially for a new player. Please review our Black Friday report, which specifically mentioned that there would be a very noticeable decline during the three weeks around Christmas.

12/27/2025 - 01/02/2026, compared to previous period

CPM	CTR	CPC	CAC
-10.40%	-0.20%	-7.36%	-9.93%
-5.39%	-2.27%	-5.39%	-6.25%
-5.26%	-1.90%	-13.72%	-8.13%
-18.41%	-7.34%	-6.11%	-2.76%
-11.08%	-4.69%	+14.77%	-0.75%
+2.68%	+8.22%	-8.83%	-0.98%
-27.55%	+2.87%	-35.01%	-17.61%
-5.75%	-7.35%	+1.33%	+19.90%

northbeam.io/newsletter

Northbeam
The Media Buyer Index
12/27/2025 - 01/02/2026, compared to previous period

CvR	ROAS	BUDGET SHARE	SHARE Δ
+0.93%	+11.40%	66.38%	+3.39%
+4.22%	+12.38%	24.62%	-4.81%
+6.66%	+6.59%	2.74%	-12.99%
-5.78%	+3.03%	2.60%	-2.40%
+7.66%	+7.64%	1.98%	-14.25%
+8.32%	+24.98%	1.03%	-4.35%

Christmas holiday typically impacts e-commerce advertisers for approximately three weeks (December 17 through January 5), during which current daily spend could decline 80%. However, gaming advertisers enter peak season during this period"
FundaAI
Deep | APP: Black Friday Update - E-Commerce Advertising Progress Shows Meaningful Improvement
FUNDAAI.SUBSTACK.COM

SNOW Buying Observability Platform Observe:

This announcement comes on the heels of PANW buying Chronosphere for $3.5B, DDOG buying Metaplane and CRWD buying Onum.And yet no investors want to buy DDOG's stock, seemingly. From TechCrunch: "Snowflake plans to acquire Observe, an observability platform that has been built on Snowflake's databases from day one. (Observability platforms help companies monitor their software systems and data for performance issues and bugs.) The cloud data company announced it signed a definitive agreement to acquire Observe, subject to regulatory approval, on January 8. **Snowflake will integrate Observe's product into its own to give customers a unified place to collect and store their telemetry data (logs, metrics, and traces from software systems)** and better spot potential bugs and issues in their data and software. Observe was founded in 2017 by Jacob Leverich, Jonathan Trevor, and Ang Li and launched its first observability product built on a centralized Snowflake database in 2018. The company was incubated at Sutter Hill Ventures and has since raised nearly $500 million in venture capital from firms including Snowflake Ventures, Sutter Hill Ventures, and Madrona, among others." Official SNOW Press Release

"Terms of the deal were not disclosed. According to reports,**the deal is valued at around $1 billion**, which would make it Snowflake's largest acquisition to date, surpassing its $800 million purchase in March 2022 of Streamlit, an open source framework that allows developers and data scientists to quickly build and share data applications without needing expertise in front-end development. Observe was most recently valued at $848 million as of July 2025, according to PitchBook data. TechCrunch has reached out to Snowflake for more information on the deal."

From The Information: "**Observe was on track to generate $70 million in annualized revenue** by the end of its fiscal year ending this month, up from $30 million in annualized revenue a year earlier, according to three people who reviewed its financial statements…But the company, which already shared close ties with Snowflake, was recently burning cash at a pace of about $60 million annually."

Schilsky Math: $1B purchase / $70m ARR = **~14x ARR**. Certainly not terribly expensive given some recent transactions we've seen.

SNOW ended yesterday down -4% (IGV -2%).

[I still can't believe they called their observability company 'Observe'.]

DIS Co-CEOs?!:

From Matt Belloni at Puck: "**I am going to go out on a limb and say that Josh D'Amaro and Dana Walden will be co-C.E.O.s of The Walt Disney Co.** As we know, D'Amaro has the operating experience from the parks division but not the talent relationships, and Walden has talent chops from running the TV division (but not film), yet doesn't have the operating experience. I figure that, given the Bob Chapek debacle, the Disney board might hesitate to give D'Amaro the keys on his own, even though he presents much more like an Iger than a Chapek. But content is king for Disney, and including Dana as co-C.E.O. would make that clear—as would giving her 51 percent decision-making power over the film, TV, and digital units, with Josh taking a similar stake in parks, consumer products, gaming, and the other business unit lands of the Magic Kingdom. Of course, Iger is still supposed to be a presence through the coming year, so he could hypothetically familiarize Josh with the creatives during that time. Still, while I don't know if board chair James Gorman has any desire to be deferential to Iger on his way out, **I feel Iger clearly favored Walden**."

TTWO Insiders Fear *Another* GTA 6 Delay:

From Dexerto (who?): "Bloomberg reporter Jason Schreier is fearing another GTA 6 delay with Rockstar Games reportedly still working on missions…Despite being 11 months out from the new target, industry insider Jason Schreier is already fearing another slip. **According to his intel, having allegedly spoken with developers close to the project, GTA 6 still isn't content complete** – meaning missions are being worked on, and new features may still be added. As a result, Schreier claimed it's nearly impossible to gauge whether they'll hit the November, 2026 date at this stage. "I don't think anyone at Rockstar could tell you with 100% certainty," he said on the Button Mash podcast." "The last I heard, it was still not content complete," the veteran reporter said. "People are still finishing things up, finalizing levels, missions, seeing what's going to make it into the game. "They are still making stuff and will hopefully be done with that soon and have a whole bunch of time for fixing bugs." **This goes against what other insiders have claimed**, so do take the comments with a grain of salt."

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xAI ~$100m in Quarterly Revenue:

That's it? From Bloomberg: "XAI reported a net loss of $1.46 billion for the September quarter, up from $1 billion in the first quarter, the documents reviewed by Bloomberg show. In the first nine months of the year, it spent $7.8 billion in cash…**xAI revenue nearly doubled quarter-over-quarter to $107 million for the three month period ended Sept. 30, 2025**, according to financial documents shared with investors and reviewed by Bloomberg."

They are running <50% Gross Margins:

AAPL-TSM The Partnership that Built Modern Semis:

A weekend read from SemiAnalysis(in front of the paywall): "**This report traces the Apple-TSMC relationship**from Intel's 2010 rejection through five distinct phases, examining how Apple built its chip empire through acquisitions and 8,000+ engineers across 15 design centers. We analyze why competitors have failed to replicate this vertical integration, map Apple's manufacturing footprint across Fab 18 and advanced packaging facilities, and assess the strategic questions facing both companies as Intel 18A and Samsung re-engagement become viable alternatives. We'll also discuss the next phase of the relationship."

Friday Funny:

JPM TECH RESEARCH

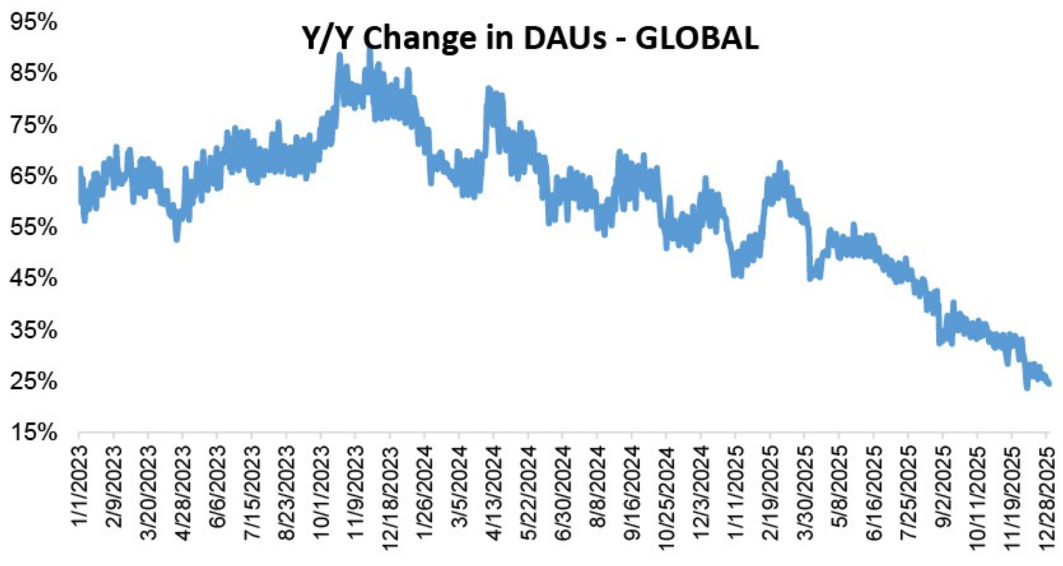
INTERNET

DUOL Monthly Report Card – DAUs Tracking In-Line:

From Bryan's DUOL Monthly Report Card – DAUs Tracking In-Line: "DUOL shares have traded down -33% since 3Q earnings on 11/5, underperforming the SPX +2%. Key recent discussion areas w/investors include: 1) 4Q Bookings are tracking above consensus, per 3P data sources, even as DUOL prioritizes user growth & efficacy improvements; 2) **Sensor Tower DAU data suggests 4Q global DAU growth of +31% Y/Y (vs. +41% Y/Y in 3Q), w/trends softer in December partially driven by less favorable Y/Y comps. Absolute global DAU data & absolute UCAN DAUs both grew +2% Q/Q in 4Q**; 3) Ramping organic marketing, performance spend, & New Year's promotions; 4) Max monetization & pricing, Guided Video Calls, & timing of China Max rollout; 5) 2026 Adj. EBITDA margin trajectory — we project +220bps Y/Y expansion; & 6) We believe investors are looking for capital returns potential over time, w/DUOL maintaining ~$1.1B cash, cash equivalents, & short-term investments as of 3Q. With cautious sentiment & lower expectations, we believe the initial 2026 Bookings & Adj. EBITDA outlook that will be provided at 4Q earnings could both prove better than feared & serve as a clearing event for shares."

"**Investors Expecting ~20% 2026 Bookings Growth Guidance at the Midpoint**; New Year's Promotions Consistent Y/Y. After the company's largest content expansion ever during 2025 (172 new language courses), DUOL has shifted A/B testing & optimization focus toward user growth & efficacy (DUOL scaling Duolingo Score up to 130 for top 9 languages) to drive L-T user growth & scale platform LTV. 4Q & 2026 Bookings growth will be impacted by the shift — 4Q Bookings also faces more challenging Y/Y comps. We believe product optimizations will focus on driving user growth, w/initiatives across teaching efficacy/modalities (including Flashcards), Video Call, socialization, Math, & Chess…We project Max paid subs of 2.11M in 2026 (14% of total subs), translating to Bookings of $261M (21% of Subscription Bookings)."

From Sensor Tower, blech:



DKNG/FLUT Maine on the Cusp of Legalizing iGaming:

From Daniel's DKNG/FLUT Maine on the Cusp of Legalizing iGaming: "Late Thursday, multiple news outlets reported that Maine is on the cusp of legalizing iGaming, as Governor Janet Mills announced she would allow LD 1164 to pass into law. With the bill's passage, four tribes within the Wabanaki Nation would gain exclusive rights to offer online casino, and given outstanding tribal relationships, **we expect CZR and DKNG to be key beneficiaries**. CZR already operates OSB in Maine via its close relationship with three of the four tribes (see here), while DKNG operates OSB there via its relationship with the other of the four tribes (Passamaquoddy, see here). At this time, it's unclear if additional iGaming operators will operate in Maine. The bill calls for an attractive 18% tax rate, and based on our discussions, we expect operators could launch iGaming in late 2026/early 2027."

"We estimate **Maine iGaming GGR could reach ~$200m of GGR** (Fig. 1-2), based on iGaming GGR/adult of $175-225 and Maine's 1.1m adult population."

Figure 2: Assuming ~$200m in state-wide GGR, we estimate steady-state EBITDA lift could be $20-30m for DKNG and $10-20m for CZR

in $ millions, except per adult figures

Est. ME GGR Mid-Point	**$211**

Est. DKNG Economics			
Implied DKNG Share	**50%**	**65%**	**80%**
Est. DKNG GGR	$105	$137	$169
Less: Promos (20% of GGR)	*23%*	*23%*	*23%*
Equals: DKNG NGR	$82	$106	$131
EBITDA Margin	*25%*	*25%*	*25%*
Equals: DKNG EBITDA	**$20**	**$27**	**$33**

Est. CZR Economics			
Implied CZR Share	**20%**	**35%**	**50%**
Est. CZR GGR	$42	$74	$105
Less: Promos (20% of GGR)	*23%*	*23%*	*23%*
Equals: CZR NGR	$33	$57	$82
EBITDA Margin	*25%*	*25%*	*25%*
Equals: CZR EBITDA	**$8**	**$14**	**$20**

Source: Various state gaming commissions and J.P. Morgan estimates.

ANGI Thoughts on RIF:

ANGI traded up +1% yesterday after announced a -13% RIF. Cory wrote about it in today's ANGI Thoughts on RIF: "ANGI shares traded up 13% today (vs. RTY +1%) following the company's announced RIF of ~350 employees, or ~13% of its workforce. We initially planned to provide our thoughts in our 4Q preview, but the magnitude of the move and the opportunity to briefly catch-up with the company compelled us to write sooner. ANGI has been in cost-cutting mode for the past few years, but this is the first time the company has announced a large headcount reduction. The margin improvement to date has been largely driven by lower marketing spend, the cutting of low (or no) margin revenue streams, and salesforce attrition. We believe this RIF is more about right-sizing headcount in areas such as product development and G&A against a revenue base that is down 30%+ since 2022, and it also likely reflects efficiencies from the ramp of online service pro self-enrollment and the elimination of the legacy Ads platform. While the rationale for the RIF makes sense to us, the timing is surprising given management previously communicated it expects to return to growth in 1Q26. **The lack of an update on business trends in the 8K suggests to us that 4Q performance was largely in-line with guidance, but there is risk that the RIF could signal a less optimistic 2026 growth outlook**."

SOFTWARE

CRWD to Acquire SGNL to Extend Dynamic Identity Reach:

From Brian's CRWD to Acquire SGNL to Extend Dynamic Identity Reach: "Earlier today CrowdStrike announced a definitive agreement to acquire SGNL for $740mm in a transaction expected to close in 1Q27, with consideration expected to be primarily cash with a portion comprised of vesting stock. **The acquisition is well timed in our view, as demand for dynamic identity security continues to accelerate.** SGNL evolved from an authorization platform into one that effectively sits between users or agents and resources such as applications and systems, with an ability to mine data and telemetry to make real-time access decisions. We expect SGNL will extend Falcon Next-Gen Identity Security with access enforcement capabilities that eliminate standing privileges across human, non-human, and agentic identities by continuously granting and revoking access in real-time based on data and telemetry ingested across the Falcon platform. The acquisition frames a strategy of building an end-to-end identity security platform and follows previous related acquisitions that include Preempt (ITDR), Bionic (ASPM), and Pangea (AI security)."

"Valuable IP with little contribution to ARR/Revenue expected."

ADSK/BSY/PCOR Vertical Voices & Buyer Insights:

From Alexei'sADSK/BSY/PCOR Vertical Voices & Buyer Insights:

- "**Autodesk: the horizontal king**. Autodesk is widely regarded as the central hub for design coordination with its versatility making it indispensable for both building and infrastructure projects. However, experts consistently note that Autodesk's interface can be cumbersome and its learning curve steep, often requiring significant training and manual effort to achieve efficiency, especially on complex or multi-party projects. While its versatility and industry adoption are clear strengths, users report that workflow bottlenecks and usability challenges. As the market evolves, buyers are increasingly seeking solutions that combine Autodesk's depth with greater ease of use and streamlined processes."
- "**Bentley: the nichey exceptionalist for structural engineers**. Bentley stands out for its powerful, object-oriented toolset and streamlined interface, making it the platform of choice for large-scale infrastructure and DOT projects. Its ability to handle state standards, earthmoving, and intelligent transportation systems is valued, justifying its higher license cost for complex engineering work. However, Bentley's focus remains primarily on design and engineering, with its construction management modules seen as add-ons rather than core strengths. Many firms rely on Bentley for structural design but export models to Autodesk for broader collaboration, reflecting Bentley's specialized but essential role in the project lifecycle."
- "**Procore: qualmish, but universal for general contractors**. Procore is the preferred solution for construction management and subcontractor onboarding, especially on large, multi-party projects. Experts highlight Procore's intuitive interface, open API, and strong capabilities in progress tracking and reporting. Its ease of use is a major advantage for onboarding subcontractors and managing construction workflows. However, recurring frustrations include rigid, volume-based pricing, declining customer service, and limited integration with advanced scheduling tools. These issues are prompting some buyers to actively seek alternatives, even as Procore remains widely adopted due to its familiarity and core strengths in construction administration."

MEDIA & TELECOM

OMC/PUB.FP/WPP.LN Q425 New Business Review:

From Karnovsky'sOMC/PUB.FP/WPP.LN Q425 New Business Review: "**For the year, PUB again led our tables**, supported by large wins with Mars, Kenvue, and Coca-Cola, along with contributions from several medium sized accounts. WPP moved into net new positive territory for Q4, helped by wins with Kenvue, Reckitt, and the UK government, though finished the year net negative (notable losses were with Bayer, Mars, and Coca-Cola). Finally, the combined OMC-IPG turned negative due to three large account losses in the penultimate week of the year (Kenvue, Jaguar Land Rover, and the UK Government)."

Figure 1: Summary Stats (by Holding Company): Q4 2025

$ is millions

	2025 Q4					
	Gross Reported Billings			NetEquivalent	Gross Reported Billings	
Holding Company	**Wins**	**Losses**	**Net**	**Revenue (Total)**	**Net Media**	**Net Creative**
Publicis	3,455	(230)	**3,225**	241	**1,805**	1,420
WPP Group	3,455	(990)	**2,465**	210	**810**	1,655
Havas	125	(265)	**(140)**	(10)	**(95)**	(45)
Stagwell	0	(370)	**(370)**	(37)	**0**	(370)
Dentsu	85	(740)	**(655)**	(59)	**(135)**	(520)
Omnicom	1,010	(3,420)	**(2,410)**	(154)	**(1,940)**	(470)
Total	$8,130	($6,015)	**$2,115**	$191	**$445**	$1,670

Note: OMC includes IPG new business.

Source: Reported billings by company, media reports, and J.P. Morgan estimates.

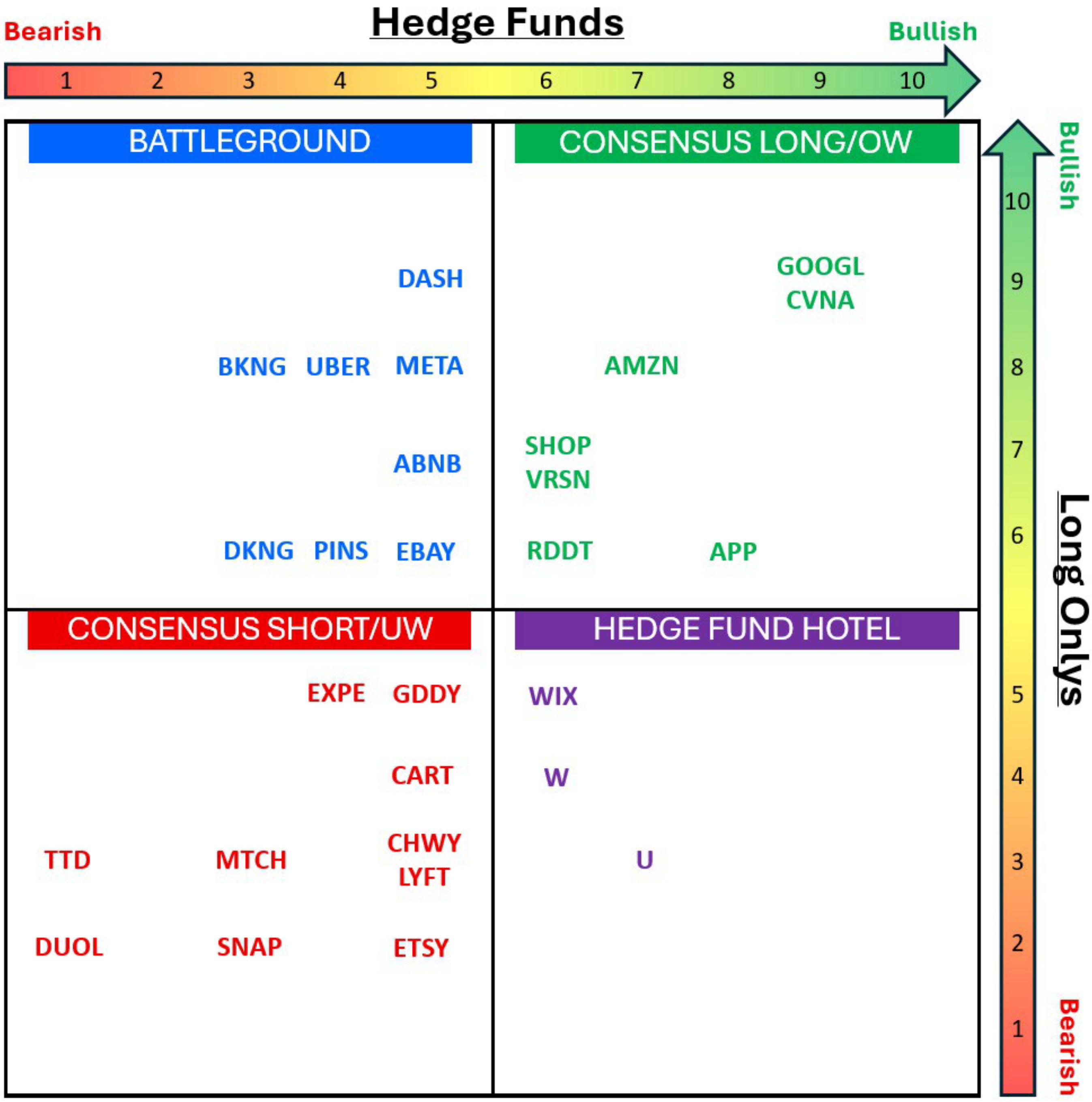
JPM TMT EVENT CALENDAR

Companies	Event	Date/Time	Registration
Tune in to find out	**Tech Spec Sales 2026 Outlook & Top Picks Webinar** w/Mark Schilsky, Josh Meyers, Scott Silver & Duncan Wagner	Jan 9 at 9AM EST	Register Here
TMUS, T, VZ, CMCSA, TDS, VSAT, LUMN, etc.	**Telecom Q425 Preview** w/Sebastiano Petti & Mark Schilsky	Jan 20 at 10AM EST	Register Here
Replit, Lightmatter, Liquid AI, ID.me, Groq, Engine.com, Brex, etc.	**Hyper Growth Private Tech Conference** in SF	Jan 21-22	Contact your JPM Salesperson.
APP, ROKU, RBLX, TTWO, MTCH, etc.	**SMID Internet & Video Games Q425 Preview Webinar** w/Cory Carpenter & Mark Schilsky	Jan 26 at 10AM EST	Register Here
DIS, TKO, SPHR, WMG, NYT, LYV, OMC, etc.	**Media Q425 Preview Webinar** w/David Karnovsky & Mark Schilsky	Jan 27 at 10AM EST	Register Here
CZR, LVS, MGM, MAR, HLT, WH, DPZ, etc.	**Gaming, Loding, Restaurant & Leisure Management Access Forum** in Vegas	Mar 11-12	Register Here
Attending Companies	**JP Morgan Industrials Conference** in DC	Mar 16-18	Register Here
Too many to list.	**JP Morgan Global Technology, Media & Communications Conference** in Boston	May 18-20	Register Here

SCHILSKY'S SENTIMENT MONITORS

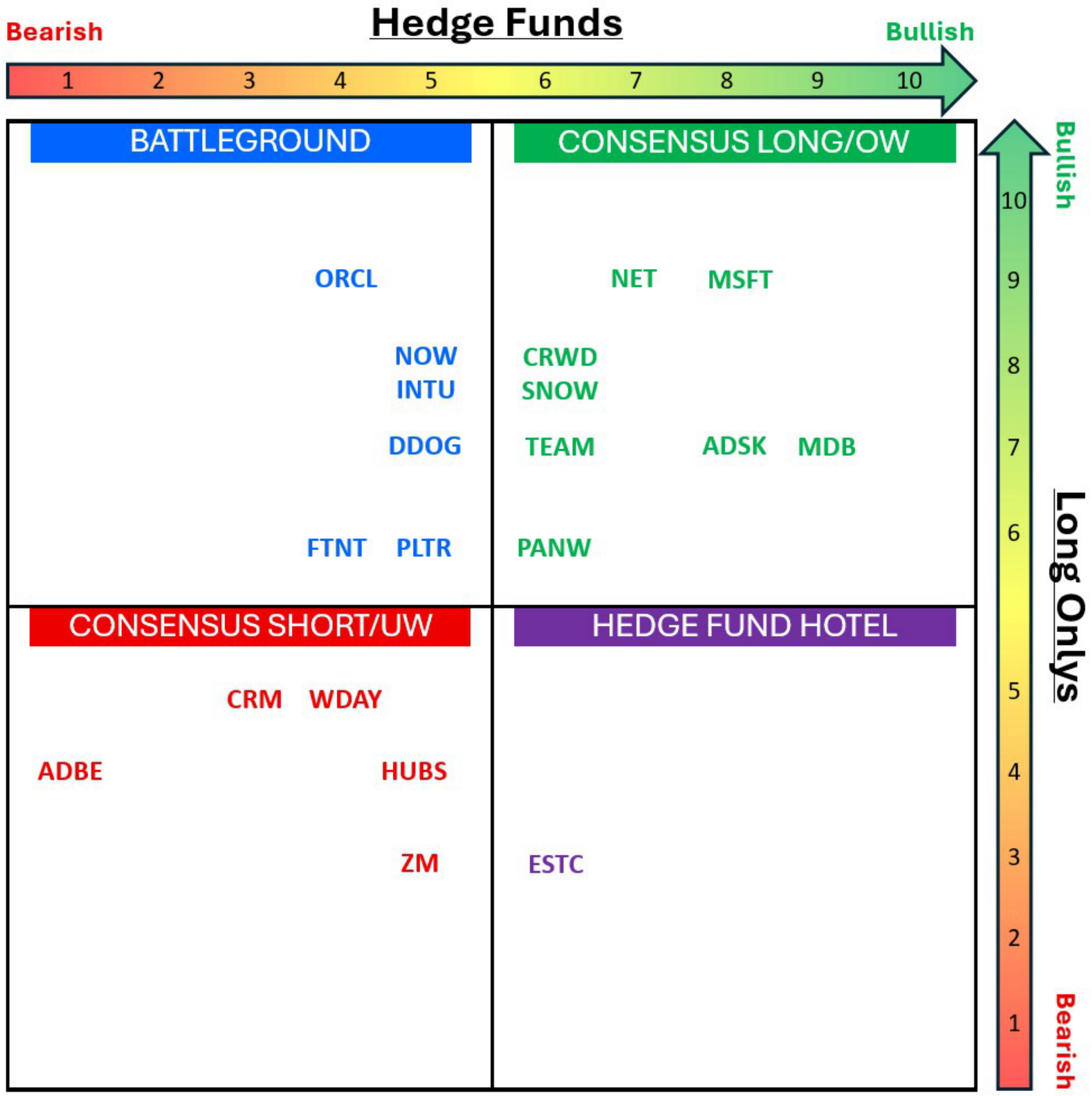
THE INTERNET SENTIMENT MATRIX:

[Last Updated 12/15/25]



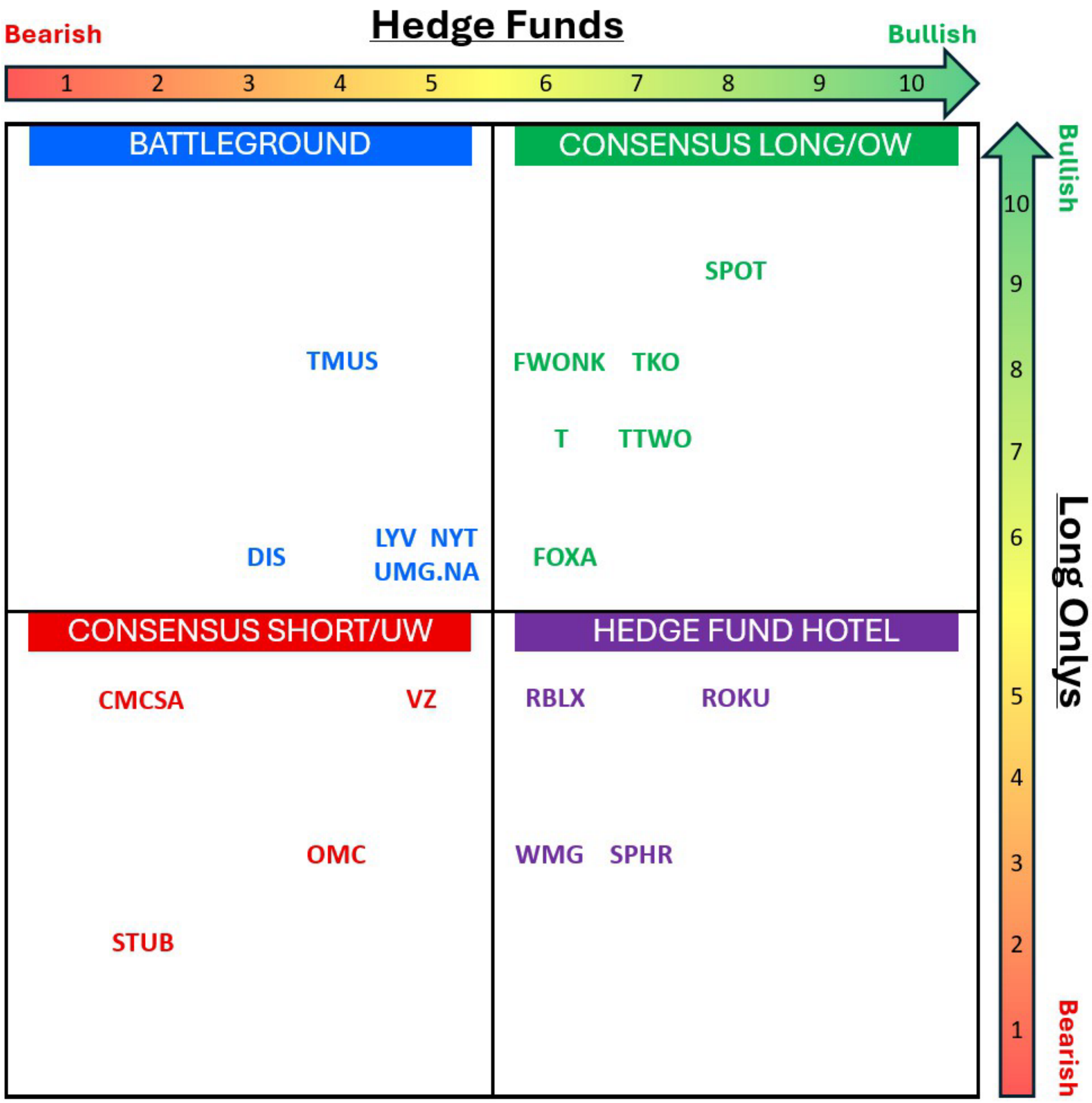
THE SOFTWARE SENTIMENT MATRIX:

[Last Updated 12/15/25]



THE MEDIA & TELECOM SENTIMENT MATRIX:

[Last Updated 12/15/25]



TMT CORPORATE EVENT CALENDAR

- **TMUS** Capital Markets Day & Q425 Earnings in NYC 2/11/26 at 8:30AM EST
- **LUMN** Investor Day in NYC 2/25/26 Website
- **CRWD/NET/FTNT/PANW** RSA Conference in SF March 23-26 Website
- **TTWO** GTA VI Launch 11/19/26 (theoretically)

[Last Updated 1/2/26]

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