

WEEK ENDING DECEMBER 06, 2024

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While the breadth of the market rally has notable increased recently, Big Tech was back en vogue this week with Nasdaq rallying +3.3%, while the S&P 500 was up +1% and the Dow was down -0.6%. So far, we are pacing for a "Santa Claus rally," but we still have a few weeks to go!

Fundamentally, we focused on the below themes and developments this week (all clicks are clickable):

- 1. The Holiday Shopping Spirit Is Still Alive Consumers Are Spending!
- 2. The Nova In The Cloud AWS' Innovation Roadmap Shines Bright At re:Invent 2024
- 3. AT&T's Plans To Build "Some Of The Most Pristine Infrastructure" In The Connectivity Industry
- 4. New LLMs Are Coming To Market, But "Progress Is Going To Get Harder" Moving Forward
- 5. Advertising Is Entering The "Algorithmic Era"
- 6. Gen Al Is Becoming A Bigger Part Of The Music Industry... For Better Or Worse
- 7. Grab Bag: TikTok Ban Looms/BTC Reaches \$100k/AV Rollout Expands To Miami And Abu Dhabi

Have a nice weekend.

Best, Leslie

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Top Themes

1. The Holiday Shopping Spirit Is Still Alive – Consumers Are Spending!

Holiday shopping seems to start earlier and earlier each year, but all eyes are always on the pivotal Thanksgiving through Cyber Monday period when consumers scramble to take advantage of steep discounts. Any concerns about consumers' ability to spend have dissipated, as spending levels hit records both globally as well as in the US, per Salesforce and Adobe data, which were for slightly different date ranges but tell the same story. Salesforce indicates Cyber Week sales were up +6% y/y globally and +7% higher in the US, while Adobe points

to Cyber Week US sales growing +8.2% y/y. Drilling down, US spending on Cyber Monday, specifically, of \$13.3bn (up +7.3% y/y) beat Adobe's previous estimate of \$13.2bn. Al and Al agents are helping to drive conversion, and consumers are getting more comfortable making bigger purchases on their phones. Looking ahead, despite the higher spending levels during this pivotal period, Adobe maintained its expectation for the full US holiday season (Nov 1 to Dec 31) sales to rise +8.4% and hit \$240.8bn.

See below for our main takeaways from Salesforce and Adobe's holiday spend data. We also included datapoints on holiday shopping trends from several other sources that were released this week, with insights regarding discounting, category leaders, and in-store traffic, among other things.

Salesforce & Adobe Data Points To Strong Holiday Cyber Week Spending (Salesforce Holiday Spend LINK/ Adobe Holiday Sales LINK)

- Note the slightly different dataset time frame for "Cyber Week"
 - Salesforce: 2024 Cyber Week (Nov 26-Dec 2)
 - Adobe: Thanksgiving through Cyber Monday (Nov 28-Dec 1)
 - Shopify: Black Friday-Cyber Monday
- Total online spend during "Cyber Week":
 - Salesforce:
 - **Global** Up +6% y/y to \$314.9bn
 - **US:** Up +7% y/y to \$76bn
 - Adobe:
 - US: Up +8.2% y/y to \$41.1bn -> exceeded its +7% y/y growth estimate
- -> For season-to-date (Nov 1 to Dec 2, 2024) in the US, Adobe consumers have spent a total of \$131.5bn online, up +9% y/y, and mobile shopping has driven a 53.1% share of online sales so far, representing \$69.8bn in spend, up +14.1% y/y
- -> **OUTLOOK**: Despite the higher spend during Cyber Week, Adobe maintained its expectations for full holiday season (Nov 1 to Dec 31) US sales to rise +8.4% to hit \$240.8bn

Spend Broken Down By Day...

- · Salesforce:
 - Black Friday: Drove \$74.4bn in global digital sales (+5% y/y), and \$17.5bn in the US (+7% y/y) →
 strongest shopping data of the week
 - **Cyber Monday:** Global online sales reached \$12.8bn in the U S (up +3% y/y) and \$49.7bn globally (up +2% y/y)
- Adobe Cyber Monday tops estimates:
 - Thanksgiving: Up +8.8% y/y to \$6.1bn
 - Black Friday: Up +10.2% y/y to \$10.8bn
 - Cyber Monday: Up +7.3% y/y to \$13.3bn -> beat their estimate of \$13.2bn

Consumers Are Getting More Comfortable Making Purchases On Mobile

- Salesforce: Mobile orders drove 70% of US and global sales, up from 67% in 2023
 - The gap between mobile traffic and mobile orders is narrowing; 80%+ of both US and global ecommerce traffic originated from a mobile device during Cyber Week
 - o In total, mobile accounted for \$220bn in sales globally and \$53.3bn in the US
 - Mobile wallet usage also increased +16% y/y globally during the week
- **Adobe:** 57% of US online sales came through a mobile device on Cyber Monday, an all-time high that represents \$7.6bn in online spending, up +13.3% y/y

Al And Al Agents Are Helping To Drive Conversion & Sales

- **Salesforce:** Al, including agents, influenced \$60bn in sales via product recommendations, targeted offers, and conversational customer service support
 - Retailers using gen AI and agents to fuel service experiences saw a +2% higher conversion rate vs retailers that didn't use the tech
- Adobe: On Cyber Monday, US traffic to retail sites from chat bots (shoppers clicking on a link to a retail site) incr'd by +1,950% y/y (but from a small base)

Customers Were Waiting For Discounts But Some Data Suggests That Discount Rates Were Slightly Down Y/Y

- Salesforce: The data shows that customers were waiting for the sales during Cyber Week, and even modest discounts got people to buy
 - The global avg discount rate was 26%, and the US discount rate was 28%, both down -1% y/y
- **Adobe:** Bigger than expected discounts were cited for electronics (peaking at 30.1% off listed price), toys (26.1%), apparel (23.2%), TVs (21.8%), and computers (21.5%)
 - Deals are expected to come down from peak levels but linger in the weeks ahead

Toys & Personal Care Were US E-Comm Growth Category Leaders On Cyber Monday

- Adobe: On Cyber Monday (US), toys were a clear winner, with online sales growing +680% vs an avg day in Oct 2024; Other categories w/ strong demand included personal care (online sales up +530%), jewelry (up +478%), appliances (up +464%), electronics (up +452%), and apparel (up +392%)
- -> At a Wall Street Conference, Mattel CEO Ynon Kreiz indicated that the Co had a strong Black Friday and that it expects to grow in Q4 and achieve its guidance for the full year; The company's stock rallied +5.6% on the back of the comments
- -> Over half of online spend so far this season has been driven by 3 categories electronics (\$30.1bn, up +10.6% y/y), apparel (\$24.6bn, up +9.5% y/y), and furniture (\$16.2bn, up +6.6% y/y), per Adobe data

Mixed Datapoints Regarding In-Store Traffic

- The National Retail Federation estimates that in-store shoppers from Thanksgiving through Cyber Monday were up y/y (link): An est'd 126mn consumers made holiday purchases in-store during the period, up from 121.4mn in 2023
 - Black Friday brick-and-mortar shoppers were 81.7mn, up from 76.2mn last year
- Simon Property reported a +6.4% y/y increase in foot traffic across its centers during Black Friday weekend (link): The Co owns premier shopping, dining, entertainment and mixed-use destinations
 - Growth at its Malls was up +7.1% y/y
- But Retail Next cited that overall store traffic on Black Friday was down -3.2% y/y (link): Footfall was down -7% in the Midwest, -2.1% in the Northeast, -3.5% in the South, and -3.2% in the West
- Also see modest Mastercard in-store data below

Other Holiday Spending Trends

- Salesforce social commerce plays a critical role for retailers: Retailers implementing social commerce strategies saw 19% of their Cyber Week sales generated through platforms like TikTok Shop and Instagram
- -> TikTok tripled its US shopping sales to more than \$100mn on Black Friday; TikTok Shop drew a +165% annual increase in shoppers for the two days between Black Friday and Cyber Monday (link)
 - Adobe Buy Now Pay Later (BNPL) hits milestone: BNPL usage hit an all-time high on Cyber Monday, driving \$991.2mn in spend (up +5.5% y/y)
 - Mastercard Spending Pulse (measures in-store and online retail sales) also pointed to robust Black Friday US e-comm sale (link): U.S. retail online and offline sales excl auto were up +3.4% y/y on Black Friday
 - Online Retail sales incr'd +14.6% y/y, while in-store sales were up a more modest +0.7% y/y
 - But per the National Retail Federation, the number of online shoppers from Thanksgiving through Cyber Monday was down y/y: An est'd 124.3mn shoppers made their holiday purchases online during the period, down from 134.2mn consumers in 2023
 - Online Black Friday shoppers totaled 87.3mn, down from 90.6mn last year
 - National Retail Federation estimated that total in-store and online spend per shopper was up y/y:
 On avg, shoppers spent \$235, up \$8 from last year

2. The Nova In The Cloud – AWS' Innovation Roadmap Shines Bright At re:Invent 2024

Amazon's biggest cloud event of the year took place this week, and generative AI was all the focus across the multitude of announcements, launches, and enhancements. There was a lot unveiled at the event, most notably Amazon's official entry into the genAI model race with the introduction of Amazon's Nova foundation models. The Co also announced that its working on building one of the largest ever AI supercomputers used for training AI models, powered by its Trainium chip. Additionally, there were significant updates to Amazon Bedrock (Amazon's svs for building genAI applications), amongst a whole host of other developments.

While there were more updates out from the event than could be counted, we highlighted what we thought were the most pertinent and incremental below.

-> AWS re:Invent 2024 took place across Dec 2-6, and Amazon's stock continued to rise through the week, finishing up +9.2%; YTD, the stock is up +49.4%

Introduced New Foundational Model - Amazon Nova (link/link)

- Amazon Nova is "a new generation of state-of-the-art foundational models" available exclusively in Amazon Bedrock
 - Understands and generates content in 200+ language
 - Said to be up to 75% cheaper than other models
- Includes three understanding models (with a fourth coming soon)...: Accepts text, image, or video inputs and generates text output
 - Amazon Nova Micro: Text-only model that delivers the lowest latency responses in the Amazon Nova family at a very low cost
 - "Excels" at tasks such as text summarization, translation, content classification, interactive chat and brainstorming, and simple mathematical reasoning and coding
 - Amazon Nova Lite: Low-cost multimodal model that is "lightning fast" for processing image, video, and text inputs to generate text output
 - Can handle real-time customer interactions, document analysis, and visual questionanswering tasks with "high accuracy"
 - Amazon Nova Pro: "Highly capable multimodal model with the best combination of accuracy, speed, and cost for a wide range of tasks"
 - Demonstrates "strong capabilities in processing both visual and textual information and excels at analyzing financial documents"
 - Amazon Nova Premier (still in training): "Most capable" multimodal model for "complex" reasoning tasks; Targeting availability in early 2025
- ...and two creative content generation models: Accepts text and image inputs and produces image or video outputs
 - Amazon Nova Canvas: Image generation model
 - Produces "studio-quality images with precise control over style and content, including rich editing features such as inpainting, outpainting, and background removal"
 - Amazon Nova Reel: Video generation model
 - Produces videos through text prompts and images, controls visual style and pacing, and generates professional-quality video content
 - Can currently create clips up to 6 seconds long, but aiming to provide clips up to 2 minutes long soon
- -> Separately, but related, starting this week, customers of Google's Vertex AI Google Cloud package can begin using Veo to generate 1080p videos from text prompts and images; Then, as of next week, Google will make Imagen 3, its latest text-to-image framework, available to those same users; With Veo's rollout, Google says it's the first hyperscale cloud provider to offer an image-to-video model, as OpenAI's Sora model is still only available to select artists, academics and researchers (link)

Unveiled New Supercomputer Powered By AWS Trainium AI Chips

- Announced Project Rainier, an Ultracluster AI supercomputer poised to be one of the largest ever used for training AI models
 - Powered by hundreds of thousands of Trainium 2 chips
 - Using the system to support the AI development efforts of Anthropic PBC, which Amazon has invested \$8bn into since last Sept
 - Expects to complete construction of Project Rainier next yr

- In addition to Project Rainier, AWS is also developing Project Ceiba, a partnership with NVIDIA that will utilize 20k+ NVIDIA Blackwell GPUs for AI applications
- Also announced Trn2 UltraServer, a new offering for AWS's Elastic Compute Cloud svs
 - Connects 64 of the current Trainium2 chips "into one giant server" using NeuronLink interconnections
 - Designed to lower AI model training costs by up to 40%
- AWS Trainium2 chips for building LLMs now generally available, with Trainium3 coming late 2025
 (link/link)
 - Introduced new Trainium3 chip
 - Will be 2x as fast as the existing Trainium2 while being 40% more energy-efficient
 - Will become available next year
 - Trainium2 chips are now generally available
 - Will be 4x as fast as its 2020 predecessor
 - First announced last year
 - Positioned as alternatives to NVIDIA's GPUs: "Today, there's really only one choice on the GPU side, and it's just Nvidia...we think that customers would appreciate having multiple choices"
- Apple makes a surprise appearance...and announces plans to use Amazon chips to train upcoming Apple AI models (link/link)
 - Benoit Dupin, Apple's senior director of machine learning and AI, appeared on stage of the event and talked about Apple using Amazon's chips to power search services
 - Apple is also looking to use Amazon's latest chips in pre-training of Apple's AI models based on
 its early experience, Dupin said Apple expects to see up to a 50% improvement in efficiency when
 pre-training its models on Trainium 2

Several New Features And Upgrades To Amazon Bedrock

- Introduced Amazon Bedrock Marketplace (link): Provides generative AI developers access to 100+
 foundation models from providers like IBM, Nvidia, Anthropic, and Meta; Models can be used with
 Bedrock's tools and enables quick testing and integration of various specialized models to accelerate AI
 workflows
- Announced 4 enhancements to Amazon Bedrock to improve data processing and retrieval capabilities (link)
 - Amazon Bedrock Data Automation: Simplifies processing multimodal data (documents, images, audio, video) with automated workflows like IDP, media analysis, and RAG, offering customizable and standard insights tailored to business needs
 - Now processes multimodal data in Knowledge Bases: Enables parsing of both text and visual data from documents and images, improving the accuracy and relevancy of Al-generated responses
 - Now supports GraphRAG (in preview): Combines RAG techniques with graph structures to deliver more precise, comprehensive responses by understanding relationships within complex data
 - Now supports structured data retrieval: Allows natural language querying of data warehouses and lakes, integrating structured data into conversational interfaces and accelerating generative Al application development
- Introduced multi-agent collaboration capability which enables the building, deployment, and management of multiple AI agents working together on complex multi-step tasks that require specialized skills (link)
- Launched Amazon Bedrock Model Distillation, a tool to transfer the capabilities of a large model to a small model that's cheaper and faster to run for a specific use case (link)
- For Al safety, introduced Automated Reasoning checks in Bedrock to prevent hallucination and new Al Service Cards for transparency (link/link/link/link)
 - Automated Reasoning checks help prevent factual errors from hallucinations by using sound mathematical, logic-based algorithmic verification and reasoning processes to verify the information generated by a model
 - MSFT and GOOG have a similar offering: Microsoft has the Correction feature which flags Al-generated text that might be factually wrong; Google offers a took in Vertex AI, its AI dev platform, to let customers "ground" models by using data from 3P providers, their own datasets, or Google Search

- Al Service Cards will enhance transparency by providing customers with a single place to find information on the intended use cases and limitations, responsible Al design choices, and performance optimization best practices for AWS Al services
 - Introduced new ones for Amazon Nova Reel, Amazon Canvas, Amazon Nova Micro, Lite, and Pro, Amazon Titan Image Generator, and Amazon Titan Text Embeddings
- "Tens of thousands of customers use Amazon Bedrock today, with Moody's, PwC, and Robin Al among those leveraging these new capabilities to cost-effectively scale inference and push the limits of generative Al innovation" (link)

Additional Key Incremental Updates From The Event

- New enhancements for Amazon Connect, AWS's cloud contact center solution, including (link)
 - GenAl-powered customer segmentation for targeted campaigns
 - Native WhatsApp Business messaging for omnichannel support
 - Secure collection of sensitive customer data in chat interactions
 - Simplified conversational AI bot management in the Amazon Connect interface
- Announced new enhancements to Amazon Q Developer, "the most capable generative Al assistant for software development", including (link) –
 - Enhanced documentation in codebases
 - Supporting code reviews to detect and resolve security and code quality issues
 - Generating unit tests automatically and improving test coverage
- A whole host of updates across Amazon Q Business set to launch in 2025 (link)
 - Expanded 3P integrations: Can now perform tasks across platforms like Google Workspace, Microsoft 365, Smartsheet, Zoom, Asana, and Miro
 - 3P svs can integrate Q into their own offerings via an API, leveraging Q's data indexing capabilities
 - Comprehensive indexing: Can pull and integrate data from 40+ tools (i.e., Google Drive, SharePoint, Jira) and now combines this with databases, data warehouses, and lakes for personalized insights
 - Generative Al for automation: Users can describe workflows in natural language or upload process documents to let Q create and maintain automated agents
- Announced new database capabilities for Amazon Aurora and DynamoDB (link)
 - Introduced Amazon Aurora DSQL, "the fastest distributed SQL database": A new serverless, globally distributed SQL database offering 4x faster performance, strong consistency, and automated scalability with zero maintenance.
 - Enhanced Amazon DynamoDB global tables to now support strong consistency across multiple regions, ensuring always up-to-date data for global applications without having to change application code
- Introduced Buy with AWS an accelerated procurement experience on AWS Partner sites, powered by AWS Marketplace (link): Enables users to discover and purchase solutions from AWS Partner sites using their AWS account, streamlining product procurement both on AWS Marketplace and external Partner websites

3. AT&T's Plans To Build "Some Of The Most Pristine Infrastructure" In The Connectivity Industry

After T-Mobile's recent Investor Day (see Theme #3 from 9/22/24 Weekly) and Verizon's Capital Markets Day (see Theme #2 from 10/25/24 Weekly), AT&T hosted its own Analyst & Investor Day this week to outline a new, multi-year strategic plan that will eventually provide the business with "some of the most pristine infrastructure in this industry" and the ability to "print a lot of cash." AT&T believes fiber is "destined to be nearly ubiquitous" by the end of the decade, and the company will look to play a central role in turning this vision into reality. By the end of 2029, AT&T is aiming to cover 50mn+ households with fiber between ~45mn owned and operated fiber passings and ~5mn from its Gigapower initiative and open access commercial fiber partnerships. This represents a ~+70% increase from the ~29mn fiber passings that are expected at the end of 2024 over just a five-year period. One of the company's main motivations for this push is the robust demand it has been seeing for converged offerings, and the strong performance of its markets across both AT&T Fiber and AT&T Wireless have provided further

confidence that these investments will generate "attractive returns," with 50% fiber penetration and 50% penetration of its converged products expected over the longer-term.

As part of its efforts to lead the industry in convergence, AT&T will also step up efforts to modernize its wireless network over the next three years. Along with extending its mid-band 5G spectrum to 300mn+ people in the US by the end of 2026, the company is also transitioning to an open-access architecture that will allow it to use a variety of different vendors for its wireless endpoints, which will mitigate the cost curve on its equipment purchases. This, combined with other ongoing efforts to reduce costs and transition customers off legacy copper infrastructure, will enable AT&T to achieve its ambitious fiber and 5G deployment goals without exceeding its current annual level of capital investment of \$22bn over the next three years.

AT&T also provided several additional financial targets for the 2025-2027 period, which include consolidated service revenue growth of ~+lsd% annually and adj EBITDA growth at a +3% "or better" rate annually. Excluding DIRECTV, 2025 adj EPS is projected to range from \$1.97-2.07 (vs \$1.90-1.95 in 2024, excluding DIRECTV) before starting to grow at a ~double-digit% rate in 2027. This will culminate in AT&T generating \$50bn+ of financial capacity over the next three years, of which ~\$40bn will be distributed to shareholders via buybacks and dividends. The remaining ~\$10bn will be allocated toward potential organic or inorganic strategic investments.

All said, there was a lot to delve into, and AT&T's Investor Day contained a lot of favorable updates for investors. See below for our take on what was more incremental from the 3+ hour presentation.

-> AT&T shares rose +4.6% in reaction to the Investor Day and ended the week up +3.1%; YTD, AT&T stock is trading up +42.3%, compared to +12.4% for Verizon, +52.0% for T-Mobile, +3.7% for Charter, and -1.6% for Comcast

A New, Multi-Year Strategic Plan Was Unveiled W/ Financial Targets For The 2025-2027 Period

- Guides for consolidated svs rev growth in the ~+lsd% range annually
 - Mobility svs rev growth will be between +2-3% annually
 - Consumer fiber broadband rev will grow +2-3% annually
- Expects adj EBITDA growth of +3% or better annually
 - Mobility EBITDA will grow in the ~mid-teens% annually
 - Consumer Wireline EBITDA is expected to grow at a ~double-digit CAGR through 2027
 - Business Wireline EBITDA is forecasted to grow at a ~low-double-digit CAGR through 2027:
 W/ Business Solutions EBITDA approaching stabilization by the end of 2027
- Adj EPS (excluding DIRECTV) is projected to be \$1.97-2.07 in 2025: Growth in adj EPS is expected to accel to a ~double-digit% in 2027, w/ the primary drivers being adj EBITDA growth and the benefit of share repurchases over the next three yrs
 - Beginning in Q1:25, the Co plans to report adj EPS and FCF excluding earnings and CFs from DIRECTV: Due to the pending disposition of DIRECTV equity method investment
 - The Co continues to expect the sale of its entire 70% stake in DIRECTV to TPG to close in mid-2025
- Capital investment is expected in the \$22bn range annually: Highlighted three efficiencies that will begin in 2025 and enable the Co to increase its annual fiber CapEx while staying in the \$22bn total capital investment range
 - \$3bn+ in cost savings are projected by the end of 2027: This is inclusive of the Co's current target of achieving \$2bn+ in run-rate cost savings by mid-2026; Expects to continue "bending the cost curves" for fiber build, installation, and maintenance
 - CapEx related to the wireless network modernization plan will peak in 2025: And then subsequently decline in 2026 before further decreasing in 2027 as it nears completion
 - Vendor financing payments will be "significantly reduced" after 2024: The Co has worked to reduce its vendor financing balance in 2024 and expects to remain within a "lower, stable range" going forward
- FCF (excluding DIRECTV) of \$16bn+ in 2025, w/ annual growth of ~+\$1bn: This is projected to result in FCF of \$18bn+ in 2027
 - AT&T also expects to receive further inflows related to the sale of DIRECTV: Including \$5.4bn in after-tax cash payments in 2025 and a \$0.5bn payment in 2029

AT&T Expects To Generate \$50bn+ In Financial Capacity Over The Next Three Yrs

• \$40bn+ of AT&T's financial capacity will be returned to shareholders from 2025-2027: Via dividends and share repurchases; One analyst estimated that the \$40bn of capital returns through 2027 would

equate to ~80% of the Co's total FCF over the period

- The plan would result in \$20bn+ in total dividend payments: As the Co expects to maintain its current annualized stock dividend of \$1.11 per share moving forward
- The other ~\$20bn will be used for share repurchases
 - AT&T's board authorized an initial tranche of ~\$10bn in common stock repurchases: This will be commenced when the Co reaches its 2.5x net leverage target range and is expected to be concluded by the end of 2026
 - ~\$10bn of share repurchases are expected in 2027: Pending board authorization
- Another ~\$10bn in "incremental financial flexibility" is also expected: This will be used for items such as potential organic or inorganic strategic growth investments, debt repayment, redemptions of non-controlling interests, or addt'l dividends or share repurchases

AT&T Is Targeting 50mn+ Fiber Passings By The End Of 2029

- Owned and operated passings will reach ~45mn by the end of 2029: The Co plans to exit 2024 w/ 29mn passings and will expand its reach by an addt'l ~+15mn by the end of the period
 - Bizs passed w/ fiber will increase by +40% before the end of the decade: That would bring the total up to 6.5mn biz locations
- Gigapower and commercial open-access agreements will contribute more than +5mn addt'l fiber locations: Faster than expected penetration rates, adoption of higher speed tiers, and higher adoption of converged products gives AT&T "the confidence to keep growing there"
- AT&T is targeting 50% fiber penetration in the longer-term: Suggesting that ~22.5mn of AT&T's ~45mn covered households will purchase Fiber from the Co, a +13.5mn increase from the current base

"Winning W/ Convergence" Is Another Focal Point

- AT&T sees a path to 50% converged penetration over the "longer-term" as it expands its fiber footprint: In some of the Co's newly built mkts, it is already achieving 50% penetration; Over the last three yrs, AT&T's converged penetration rate has incr'd +400bps
 - Some analysts estimate that consumer fiber could yield ~5.4mn incremental postpaid phone households: This would mean ~13.5mn postpaid phone lines, assuming ~2.5 lines per household; This estimate also accounts for AT&T's other long-term target of 50% fiber penetration
 - 4 out of 10 AT&T consumer Fiber subscribers already have wireless w/ the Co: This implies that ~3.6mn of AT&T's ~9.0mn consumer Fiber customers have wireless w/ the Co currently
- **Gigapower is seeing "early success" as well:** Relative to AT&T's original biz case, the Co is seeing higher penetration rates as well as "higher adoption of converged" and higher speed tiers in non-traditional mkts
- Addt'l stats about convergence and its value to AT&T's biz
 - 77% of customers say that want to get internet connectivity from just one Co
 - Postpaid churn is ~-25bps lower within AT&T's fiber footprint vs outside of it: There is also a
 "double benefit" when a customer is converged, resulting in a +45bps improvement in churn vs a
 standalone AT&T Fiber customer
 - Customers that have both AT&T Fiber and wireless have a +2x higher NPS score
 - Converged customers have a +15% higher LTV: Given that they are more likely to have more lines per account and select higher speeds

There Are Also Plans To Modernize The Wireless Network

- AT&T will cover 300mn+ people w/ mid-band 5G spectrum by 2026: Would represent more than a +30mn increase from 270mn by the end of 2024
 - This is expected to drive "significant efficiencies in recurring network costs": Including energy savings, fewer tower configurations, and turf vendor consolidations
- The Co is also working on transforming its wireless RAN into a more open architecture: This will enable AT&T to serve growing traffic demands more cost efficiently and w/ a better customer experience
 - AT&T anticipates that ~70% of its 5G data traffic will flow across open architecture by the end of 2026: This transition will open up optties for new and disruptive tech partners to engineer wireless access endpoints for AT&T's network "at a much better cost curve"
- Network modernization will "unlock a consistent network API architecture": Which, in turn, will enable more rapid product development and open the network up for future monetization oppties

The Co Plans To Remove All Customers From Its Copper Plant By 2029

- AT&T already halved the territory where it offers legacy copper svs "ahead of plan": At the Co's 2022 Investor Day, it had previously guided to reduce the square mileage where it offers legacy copper svs by -50%, or by ~-250k sq miles
- The Co's exit strategy will be "geographically focused at a wire center level": AT&T currently has 4,600 wire centers, which represents the largest equipment in the central office, and will "carefully" orchestrate migrations and exit copper based on the profitability of the wire center and the plan for its fiber builds
 - California isn't included in the plans as of yet: AT&T is working w/ policymakers to define its
 path in the state
 - "Not every customer location will be reached w/ fiber in these areas": Instead, the Co will serve customers in these areas w/ wireless alternatives (Internet Air)

Business Solutions (Biz Wireline + Biz Mobility) Is A "Very Important Part Of The Long-Term Plan"

- There is "room to grow" in fiber penetration: The Co's penetration rate where it has owned and operated fiber at a biz is below 30% overall
- SMBs represent a "significant oppty" for AT&T: Flagged that close to 70% of the business locations where the Co has fiber are also occupied by SMBs; There is "even more upside" for AT&T there, given its lower penetration rate
 - **AT&T plans to retool its distribution:** The Co is going to expand its indirect presence by taking "new routes to mkt" via an agent model; This will help it win w/ SMBs
 - The Co is also making investments to "continue to build momentum" in its digital channels: Specifically, AT&T is working on simplifying its platform and developing a converged experience for customers
- AT&T will sell Internet Air where it doesn't have fiber...: The offering has no speed caps and can serve as primary access for small bizs
 - ... But also leverage the product as aprimary or backup network for its fiber svs: Particularly for medium or larger bizs
- The Co will also continue to lean into FirstNet moving forward: AT&T's first responder network currently serves 6.4mn connections across 29,000+ public safety agencies

The 2024 Outlook Was Also Updated - EPS Will Be Higher Than Expected

- Adj EPS guidance was raised at the low-end: To a range of \$2.20-2.25 (vs \$2.15-2.25 prior), slightly beating cons by +0.7% at the mid-pt
 - This includes an expected adj equity in net income from DIRECTV of +\$0.30 per share posttax: Excluding this, adj EPS is projected to be between \$1.90-1.95
- Other forecasts were left unchanged: The Co still expects -
 - Wireless svs rev growth in +3% y/y range
 - Broadband rev to increase over +7% y/y
 - Adj EBITDA growth in the +3% y/y range
 - Capital investment at the high-end of the \$21-22bn range
 - FCF between \$17-18bn

4. New LLMs Are Coming To Market, But "Progress Is Going To Get Harder" Moving Forward

Along with Amazon's updates from its re:Invent conference (see Theme #2), there were several interesting LLM-related updates from other big players in the space that we wanted to flag. OpenAl, which kicked off the Al frenzy but has seen some of its market share ceded to Anthropic recently (see Theme #5 from 11/22/24 Weekly), released the full version of its o1 reasoning model this week after previously launching it in preview in September. The company also made a more compute-heavy version of o1 available exclusively to subscribers to its new, \$200/month premium subscription tier for ChatGPT. Elsewhere, xAl raised ~\$6bn in new equity financing reportedly at a \$40bn valuation, which marks a significant jump from its valuation of \$24bn just a few months ago in May. Alphabet CEO Sundar Pichai also offered some interesting comments on the Al space at the NYT's DealBook Summit this week. Although Pichai highlighted some "profound" changes coming to Google Search in

early 2025, he also acknowledged that "progress is going to get harder" in developing new AI models, given the diminishing marginal returns associated with throwing more data at them to drive performance improvements.

See below for more details on what we found more important.

- OpenAl released the full version of its o1 "reasoning" model as well as a more exclusive tier for \$200/mo (link): The o1 model was previously released in preview in Sept and is now available for ChatGPT Plus and Team users; Enterprise and Edu users will have access to it starting next week
 - The full version includes upgrades from the preview version: The full version is faster, more
 powerful, and more accurate; It is also better at coding and math; It can provide "reasoning"
 responses to images and is trained to be more concise, which should result in faster response
 times
 - Addt'l changes are on the horizon: Including support for web browsing, file uploads, and more, though there's no timeline for these currently
 - The Co is also introducing ChatGPT Pro: This new \$200/mo subscription tier offers unlimited
 access to OpenAl o1, GPT-4o, and Advanced Voice mode; It includes a more compute-heavy
 version of o1 (o1 pro mode) to provide the best possible answer to a question
 - OpenAl also annc'd a ChatGPT Pro Grant Program: The Co is awarding 10 grants of ChatGPT Pro to medical researchers at leading institutions, w/ plans for addt'l grants across various disciplines
- xAI, Elon Musk's AI startup, raised ~\$6bn in equity financing (link): 97 investors participated in the round, w/ contributions starting from as little as \$77,593, per an SEC filing, though details on the investors, as well as the Co's valuation and rev, were not disclosed
 - The financing reportedly values xAI at \$40bn+: This was per Bloomberg, which indicated that the capital injection is part of a funding effort that has been ongoing for several months
 - The Co was last valued at \$24bn in May: Following another \$6bn funding round
 - xAl is looking to enhance its supercomputer facility in Memphis, TN: The Co is aiming to
 accommodate at least 1mn GPUs at the facility, which has been hailed as the "largest multi-billion
 dollar investment in the city of Memphis' history," to expand its presence in the Al sector
 - Separately, Musk escalated a legal battle against OpenAl this week: Musk has alleged that the Co has attempted to monopolize the mkt for generative Al and impede competitors
- Google Search will "change profoundly" in 2025, according to CEO Sundar Pichai (link/link): Speaking at the NYT's DealBook Summit, Pichai commented, "I think we are going to be able to tackle more complex questions than ever before"
 - Changes could be coming as soon as early 2025: "I think you'll be surprised, even early in 2025, the kind of newer things Search can do compared to where it is today," per Pichai
 - Google is in the "earliest stages of a profound shift": "There's so much innovation ahead," and Google is "committed to being at the state of the art in this field"
 - Google started an Al overhaul of its Search earlier this yr: The Co added Al search summaries as well as a Lens update that allows users to search the web w/ a video
 - BUT "progress is going to get harder" and the days of "low-hanging fruit" may be over:
 Pichai suggested that the "hill is steeper" w/ developing new AI models moving forward, as Cos can no longer just build bigger models and throw more data at them to achieve better results
 - "I would love to do a side-by-side comparison of Microsoft's own models and our models":
 This was in response to Microsoft CEO Satya Nadella's comment earlier this yr that Google should've been the "default winner" in the AI race

5. Advertising Is Entering The "Algorithmic Era"

Dentsu's upwardly revised 2024 and 2025 advertising forecasts were of note this week. The ad agency raised its 2024 global ad estimate from +5% y/y growth (as of May 2024) to +6.8%, reaching \$772.4mn, reflecting improved outlooks in the US, UK, Brazil, and France as well as digital returning to double-digit growth (previously had expected +7.4%). Additionally, the sector has obviously been helped by special events (sporting & political). In 2025, global ad spend is now forecasted to rise +5.9% y/y, which is up from Dentsu's previous +4.2% y/y expectation.

A key element and theme that is expected to drive growth and the improved outlook is algorithmic (data-enabled) ads, on which spending is projected to reach 59.5% of total ad spend in 2024 and 79% by 2027.

See below for more color on Dentsu's 2024 & 2025 updated forecasts.

- 2024 & 2025 global advertising forecasts
 - 2024 global advertising spend is forecast to grow +6.8% y/y, reaching \$772.4bn: This is up from the +5% estimate published in May 2024
 - This reflects a return to double-digit growth (+10.7% vs May 2024 forecast of +7.4%) of digital ad spend, the impact of sporting and political events, and improved outlooks across the US, UK, Brazil, and France
 - 2025 global advertising spend is forecast to grow +5.9%: This is up from the +4.2% y/y growth estimated in May 2024 and outpaces the global economy by +2.7ppts
- Algorithmic ad spend in growing substantially: Algorithmically enabled ad spend is projected to reach 59.5% of total ad spend in 2024 and 79.0% by 2027
- · 2025 Regionally: Americas is expected to lead growth
 - Americas estimated +6.3% growth, driven by strong markets in the US and Brazil
 - Asia-Pacific estimated +5.8% growth, w/ significant contributions from Al-driven ad placements in markets like India
 - EMEA estimated +5% growth, with strong digital performance in key markets such as the UK
- · 2025 Channel-wise: Digital is expected to lead growth
 - Digital estimated +9.2% growth to reach \$513bn, capturing 62.7% of global ad spend (forecast +8.8% 3-yr CAGR to 2027)
 - Retail Media estimated +21.9% y/y growth (forecast +19.7% 3-year CAGR to 2027)
 - Paid Social estimated +8.7% y/y growth (forecast +7.8% 3-year CAGR to 2027)
 - Paid Search estimated +6.7% y/y growth (forecast +6.5% 3-year CAGR 2027)
 - Online Video estimated +8.0% y/y growth
 - Programmatic Advertising estimated +11.1% y/y growth, accounting for over 70% of digital ad spend (forecast +10.9% 3-year CAGR to 2027)
 - TV estimate marginal growth of +0.6%, w/ connected TV increasing by +18.4% and broadcast TV declining by -2.5%
 - o Print Media estimated -3.2% y/y decline
 - Cinema and Out-of-Home (OOH) estimated +3.9% growth y/y
- · By vertical, significant ad spend increases anticipated in -

Finance: +6.4%

• Pharmaceutical: +5.8%

Travel and Transport: +5.5%

6. Gen AI Is Becoming A Bigger Part Of The Music Industry... For Better Or Worse

There were also some noteworthy updates in the music space that we wanted to highlight this week. Continuing the Al-heavy news flow, a new study by the International Confederation of Societies of Authors and Composers found that music created by generative Al could result in over a -20% decline in artists' revenues by 2028, amounting to a -€22bn cumulative loss over a five-year period. Al also played a central role in this year's Spotify Wrapped, as the platform's personalized in-year-review included an Al podcast that compliments users' music tastes and summarizes their listening activity. However, the Al podcast received a mixed reception, and along with the lack of data on users' top music genres and other detailed stats that they've typically come to expect, many felt that this iteration of Spotify Wrapped was "boring" and a "flop." Still, it was interesting to see Spotify's Top 10 artists, songs, albums, podcasts, and (for the first time) audiobooks of 2024, which were also released this week. Who was the top artist in 2024? Unsurprisingly, Taylor Swift.

See below for more details.

- Gen Al could reduce artists' revs by more than -20% by 2028, per the CISAC (link): The International Confederation of Societies of Authors and Composers published a study this week that found that gen Alcreated music could "enrich tech Cos while substantially jeopardizing the income of human creators in the next five yrs"
 - Gen Al-created music is an "unlicensed reproduction of creators' works": CISAC president and Abba co-founder Björn Ulvaeus commented that it was "very unfair" that tech Cos should be able to use artists' work "without asking or remunerating" them
 - Revs derived from gen Al-created music represents "a transfer of economic value" -
 - Music and audiovisual creators risk losing -21% and -24%, respectively, of their revs by 2028: This would amount to a cumulative loss of €22bn over a five-yr period, as their

work is replaced

- Translators and adaptors for dubbing and subtitling would be hit the hardest: W/ more than half of their overall rev at risk
- Conversely, genAl providers of music and audiovisual are expected to generate revs of €9bn in 2028: This would mark an exponential increase from the €300mn today
- Still, Ulvaeus supports using genAl in the creative process: He believes it will lead to the
 "biggest revolution" ever seen in music, suggesting that Abba would have used it to suggest lyrics
 or add other styles, such as Motown, to their sound

Spotify Also Released Spotify Wrapped And Its Annual Top 10 List This Week...

- Many Spotify users found this yr's Spotify Wrapped "disappointing" (link): The Co's personalized inyr-review feature was "boring" and "a flop," according to users' posts on X, w/ one top post receiving 108,000+ likes
 - One of the main complaints was that Spotify prioritized the inclusion of an Al podcast for Wrapped: Spotify Wrapped usually contains clever and creative data stories that identifies users' music personalities, matches them to a town that shares their musical tastes, and describes their "audio aura," among other things
 - The Al podcast, itself, had a mixed reception: Although some users that were unfamiliar w/ Google's NotebookLM were impressed by the tech, others were uneasy w/ the feature
 - Other users were upset by the omission of more detailed stats: Including info on users' top
 music genres and top podcasts, though Spotify says that users must have at least two top podcasts
 for them to be included in the Wrapped experience
 - Addt'l criticisms: Some described the graphics & art design as "really simple," and others viewed the new "Your Music Evolution" feature as "quite strange"
- Spotify revealed its top artists, songs, albums, podcasts, and more of 2024 (link): Check out the link for more color on US-specific trends; All lists below are in descending order –

| The Top 10 Artists Streamed Globally | | | | |
|--------------------------------------|--|--|--|--|
| 1. Taylor Swift | | | | |
| 2. The Weeknd | | | | |
| 3. Bad Bunny | | | | |
| 4. Drake | | | | |
| 5. Billie Eilish | | | | |
| 6. Travis Scott | | | | |
| 7. Peso Pluma | | | | |
| 8. Kanye West | | | | |
| 9. Ariana Grande | | | | |
| 10. Feid | | | | |

| The Top 10 Most-Streamed Songs Globally | | | | |
|---|--|--|--|--|
| 1. "Espresso" by Sabrina Carpenter | | | | |
| 2. "Beautiful Things" by Benson Boone | | | | |
| 3. "BIRDS OF A FEATHER" by Billie Eilish | | | | |
| 4. "Gata Only" by FloyyMenor, Cris Mj | | | | |
| 5. "Lose Control" by Teddy Swims | | | | |
| 6. "End of Beginning" by Djo | | | | |
| 7. "Too Sweet" by Hozier | | | | |
| 8. "One Of The Girls (with JENNIE, Lily Rose Depp)" by The Weeknd | | | | |
| 9. "Cruel Summer" by Taylor Swift | | | | |
| 10. "Die With A Smile" by Bruno Mars, Lady Gaga | | | | |

| The Top 10 Most-Streamed Albums Globally | | | |
|---|--|--|--|
| 1. THE TORTURED POETS DEPARTMENT: THE ANTHOLOGY by Taylor Swift | | | |
| 2. HIT ME HARD AND SOFT by Billie Eilish | | | |
| 3. Short n' Sweet by Sabrina Carpenter | | | |
| 4. MAÑANA SERÁ BONITO by Karol G | | | |
| 5. eternal sunshine by Ariana Grande | | | |
| 6. 1989 (Taylor's Version) by Taylor Swift | | | |
| 7. SOS by SZA | | | |
| 8. Lover by Taylor Swift | | | |
| 9. Fireworks & Rollerblades by Benson Boone | | | |
| 10 Starboy by The Weeknd | | | |

| The Top 10 Podcasts Globally |
|--|
| 1. The Joe Rogan Experience |
| 2. Call Her Daddy |
| 3. Huberman Lab |
| 4. This Past Weekend w/ Theo Von |
| 5. The Diary Of A CEO with Steven Bartlett |
| 6. Serial Killers |
| 7. Relatos de la Noche |
| 8. Crime Junkie |
| 9. Café Com Deus Pai Podcast oficial |
| 10. El Podcast de Marian Rojas Estapé |

| 1. A Court of Thorns and Roses by Sarah J. Maas |
|---|
| 2. The Fellowship of the Ring by J. R. R. Tolkien |
| 3. I'm Glad My Mom Died by Jennette McCurdy |
| 4. A Court of Mist and Fury by Sarah J. Maas |
| 5. It Ends with Us by Colleen Hoover |
| 6. The 48 Laws of Power by Robert Greene |
| 7. A Court of Wings and Ruin by Sarah J. Maas |
| 8. A Game of Thrones: A Song of Ice and Fire: Book One by George R. R. Martin |
| 9. Icebreaker: A Novel by Hannah Grace |
| 10. Fourth Wing by Rebecca Yarros |
| |

The Top 10 Audiobooks Globally

-> Spotify also highlighted that 500mn+ people listened to a podcast since the Co entered the mkt in 2019 and that there are now 300k+ video podcasts on Spotify

7. Grab Bag: TikTok Ban Looms/BTC Reaches \$100k/AV Rollout Expands To Miami And Abu Dhabi

- US appeals court upholds law requiring sale or ban of TikTok (link/link): The US Court of Appeals for the DC Circuit upheld a federal law that will ban TikTok in the US over national security concerns, unless Chinese parent company ByteDance sells its interest in the app by Jan. 19, 2025
 - What was the ruling? The 3-judge panel found that national security risks outweighed the
 argument put forth by TikTok and ByteDance that the law violates the First Amendment rights the
 app's users
 - What comes next? TikTok is expected to appeal to the Supreme Court, but the justices are under no obligation to hear the case
 - TikTok responds: "The Supreme Court has an established historical record of protecting
 Americans' right to free speech, and we expect they will do just that on this important constitutional
 issue. Unfortunately, the TikTok ban was conceived and pushed through based upon inaccurate,
 flawed and hypothetical information, resulting in outright censorship of the American people"
 - What would a ban look like? The ban doesn't make it a crime for TikTok's US users to keep using
 the app, but it prohibits mobile app stores (i.e., Google Play Store, Apple App Store, etc.), from
 letting users download or update it and bars internet hosting services from supporting the app
- -> Both Meta and Snap traded up +2.4% and 2.2%, respectively, on the news, and ended the week up +8.6% and +5.3%, respectively
 - · Crypto has been surging since Election Day -
 - President-elect Trump nominates ex-SEC Commissioner Paul Atkins as SEC chair (link/link):
 Atkins served as SEC commissioner from 2002-2008 and is known for his pro-business stance and being a strong backer of cryptocurrencies; He's now the CEO of consulting firm Patomak Global Partners, which has clients across the financial and cryptocurrency industries
 - Outgoing Chair Gary Gensler was known for being a tough critic of crypto
 - Robinhood was supportive of the nomination, as the Co's Chief Legal Officer Dan Gallagher said that Atkin's is "the perfect pick for SEC chair" (Gallagher previously worked for Atkins at the SEC and at Patomak Global Partners)
 - Hours after the announcement, Bitcoin hit \$100,000 for the first time: Reached the milestone on Wednesday Night (Dec 4th), hours after president-elect Trump announced Atkins' nomination
 - Ethereum has also been seeing a run up (link)
 - Ethereum traded up above \$4,000 for the first time since March on Friday (Dec 6th)
 - Ethereum ETFs recorded their highest-ever single-day net inflows on Thursday (Dec 5th) after bringing in \$428.5mn, per Coinglass data
 - US ETFs investing directly in Bitcoin and Ether saw record inflows in November, at \$6.5bn and \$1.1bn respectively, per data compiled by Bloomberg (link)
- -> Bitcoin was up +5.1% this week and has risen up +48.1% since Election Day (Nov 5th); Coinbase has also been a beneficiary of the crypto surge, with the stock up +16.0% for the week, and up +77.2% since Election Day
 - · Autonomous vehicle rollout continues -
 - Google's Waymo is expanding into Miami (link): Waymo will first begin the rollout in Miami with human safety driven drivers in 2025 before offering its robotaxi svs through its Waymo One app in 2026
 - Waymo first tested in Miami in 2019, which the Co said helped improve the ability of its selfdriving vehicles to navigate in wet and rainy conditions
 - Miami will be the 5th city Waymo operates in, joining Phoenix, Los Angeles, San Francisco, and Austin
 - Uber and WeRide launch robotaxi svs in Abu Dhabi (link/link): Uber and Chinese AV tech Co
 WeRide have launched a commercial robotaxi service in Abu Dhabi, making it Uber's first intl AV
 offering; The initial rollout will be smaller in scale and only available in "key areas", with plans to
 expand operating territory in the future; A human safety operator will be present in each vehicle to
 start, with a fully driverless commercial launch planned for later in 2025
- -> On the back of the news on Thursday that Waymo was expanding into Miami, both Uber and Lyft fell -9.6% and -10.1%, respectively

Stock Market Check

Market Changes the Past Week

| Benchmark | Abs. Value | W/W Change | |
|------------------------|-------------|------------|--|
| S&P 500 | 6,090 | 1.0% | |
| NASDAQ | 19,860 3.3% | 3.3% | |
| Dow Jones | 44,643 | (0.6%) | |
| Gold | \$2,655 | (0.1%) | |
| WTI Crude | \$67.17 | (1.2%) | |
| 10-Year Treasury Yield | 4.15% | (2.3) bps | |
| Bitcoin | \$101,570 | 3.3% | |
| Ether | \$4,072 | | |

LionTree TMT Universe Performance (~250 stocks)

| Best-Performing Stocks | + | Worst-Performing Stocks | _ |
|--------------------------|------------------------------------|----------------------------------|---------|
| Asana Inc | 44.9% | Qurate Retail Inc | (19.3%) |
| Groupon Inc. | 38.1% | Domo Inc | (14.7%) |
| Docusign Inc | 34.3% | 34.3% Intel Corp | |
| Fastly, Inc. | 28.5% Virgin Galactic Holdings Inc | | (11.2%) |
| Roku Inc. | 21.9% nCino, Inc. | | (10.9%) |
| BuzzFeed, Inc. | 20.4% Toast Inc | | (10.9%) |
| Applovin Corp. | 19.2% Oscar Health Inc | | (9.9%) |
| Roblox Corp. | 18.3% Lemonade Inc. | | (9.2%) |
| Prosiebensat 1 Media SE | 18.0% | | |
| Jumia Technologies AG | 17.2% Lyft Inc | | (8.2%) |
| Best-Performing | | Worst-Performing | |
| Sub-Industries | + | Sub-Industries | _ |
| Application Software | 8.8% Space | | (11.2%) |
| e-Commerce | 8.5% Last Mile Transport/Delivery | | (5.6%) |
| Ad Tech | 8.0% Digital Real Estate | | (2.5%) |
| Satellite Communications | 6.9% | 6.9% Telecom Infrastructure | |
| Internet/Advertising | 5.6% | 5.6% Out of Home Advertising | |
| Cybersecurity Software | 5.3% | 5.3% European Telco | |
| Software IT Services | 5.2% | | |
| EdTech | 4.9% | % Advertising Agencies | |
| Semis | 3.8% | US Print Media / Publishing 0.5% | |
| | | | |

This Week's Other Curated News

Advertising/Ad Agencies/Ad Tech

- Interpublic Group annc'd the acquisition of Intelligence Node, an eCommerce intelligence platform renowned for its unparalleled data accuracy and global reach. This strategic move significantly enhances Interpublic's commerce capabilities, providing clients w/ real-time product and market intelligence to understand shopper trends, drive sales growth and optimize performance in the dynamic digital marketplace. (Hastings Tribune)
- Outbrain's shareholders have voted to approve the issuance of 35mn shares of common stock and 10.5mn Series A Convertible Preferred Shares, which are convertible into common stock, in connection with the

acquisition of Teads SA. The transaction remains subject to customary closing conditions, including regulatory approvals, and is expected to close during the Q1:25. (GlobeNewswire News Room)

Artificial Intelligence/Machine Learning

- Alibaba's QwQ-32B-Preview, a 32.5-billion parameter AI model, rivals OpenAI's reasoning models and is
 openly available under a permissive license. Excelling in math and logic benchmarks, it uses test-time compute
 for enhanced reasoning. However, it faces challenges like language switching and political sensitivity due to
 Chinese regulations. This marks a shift as AI firms explore new architectures amid scaling law scrutiny.
 (TechCrunch)
- Anduril Industries is partnering with OpenAl to enhance US military defenses against drone threats using Al models trained on Anduril's CUAS data. The collaboration aims to improve situational awareness and reduce operator workload. (Defense News)
- AWS has enhanced Amazon Connect with Al-powered features, including a segmentation tool for targeted marketing, integration with Amazon Lex and Q for personalized customer support, and new Salesforce and WhatsApp integrations. Additionally, Al tools now allow deeper analysis of contact center performance, helping businesses manage millions of interactions more efficiently.(SiliconANGLE)
- By June, China had 230mn GenAl users, with Baidu's Ernie Bot leading at 11.5% market share. OpenAl's
 ChatGPT and Google's Gemini followed with 7% and 3.8%, despite not being officially available in China. Nearly
 two-thirds of users use LLMs for answering questions, while one-third use them for work tasks. As of November,
 over 190 GenAl products were commercially available in China, despite hardware restrictions.(South China
 Morning Post)
- DeepMind, Google's Al research org, has unveiled a model that can generate an "endless" variety of playable 3D worlds. Called Genie 2, the model the successor to DeepMind's Genie, which was released earlier this yr can generate an interactive, real-time scene from a single image and text description (e.g. "A cute humanoid robot in the woods"). Many of Genie 2's simulations look like AAA video games and the reason could well be that the model's training data contains playthroughs of popular titles.(TechCrunch)
- GenCast, a new Al-based weather model, improves forecasting accuracy by predicting weather scenarios up to 15 days in advance. It outperforms traditional models like ECMWF's ENS, especially in extreme weather events such as heatwaves, high winds, and hurricanes. GenCast delivers faster, more precise predictions, benefiting areas like disaster response and renewable energy planning, and is now available for open use by researchers and agencies.(Google DeepMind)
- Google's PaliGemma 2 Al model can analyze images and generate captions, including recognizing emotions, although emotion detection requires fine-tuning. While Google claims the model has undergone extensive bias testing, experts warn that emotion detection is unreliable and culturally biased. Critics fear its misuse in high-risk areas, such as law enforcement or hiring, could lead to discrimination.(TechCrunch)
- Jeff Bezos, through Bezos Expeditions, participated in a \$693mn Series D funding round for Al chip startup Tenstorrent, alongside Samsung Securities and AFW Partners. The funding, which values Tenstorrent at over \$2.6bn, will support the development of Al software, global expansion, and new Al processors. Tenstorrent has signed contracts worth nearly \$150mn and competes with Nvidia's GPUs.(Fortune)
- Microsoft is rolling out a US-only preview of Copilot Vision, an Al tool in Microsoft Edge that reads and responds to questions about websites, summarizing, translating, or highlighting content. Available via the \$20/month Copilot Pro plan, it avoids paywalled or sensitive content. Copilot Vision deletes data after each session and respects publishers' Al controls.(TechCrunch)
- OpenAl aims to reach 1bn users by 2025, leveraging Apple integration, launching Al "agents," and building proprietary data centers in the US. With 250mn weekly ChatGPT users, it raised \$6bn+ at a \$150bn valuation to fund growth. Plans include advanced Al assistants, competing with Google and Meta, and strengthening its position in "democratic" Al amid geopolitical challenges. (TelecomTalk)
- OpenAI is considering introducing advertisements to its AI products as part of its strategy to diversify revenue, though CFO Sarah Friar clarified that there are no active plans to pursue ads at this time. The company, which has seen significant growth, has hired experts from Meta and Google to explore ad models.
 While the idea has some support, executives remain cautious due to the challenges of ad-supported models and their reliance on economic cycles. OpenAI is also exploring other monetization strategies as it faces high costs in developing AI models.(Business Today)
- OpenAl is facing a joint lawsuit from top Canadian media outlets, including Torstar, Postmedia, The Globe and Mail, The Canadian Press, and CBC/Radio-Canada. The lawsuit alleges OpenAl is using their copyrighted articles without permission to train Al systems like ChatGPT. The media companies seek punitive

damages and an injunction, accusing OpenAI of profiting from their content without compensation, adding to a broader legal battle involving multiple publishers.(The Hollywood Reporter)

Broadcast/Cable Networks

- The Macy's Thanksgiving Day Parade attracted a record 31.3mn viewers across NBC and Peacock, up 10% from last year. The live broadcast alone drew 23.6mn viewers, the highest for any entertainment show this year. The parade's success contributed to a strong TV viewing day, with other popular broadcasts including the National Dog Show and NFL games.(The Hollywood Reporter)
- Walt Disney Company continues its strategic shift away from traditional television, announcing the closure of several linear channels in Brazil. Effective Feb. 28, 2025, the following channels will cease broadcasting in the region: Disney Channel, National Geographic, Star Channel, FX. This move follows a pattern established by Disney in recent years, with similar channel closures in countries like Australia, South Korea, and the United Kingdom.(Cord Cutters News)

Cable/Pay-TV/Wireless

- China Mobile has proposed acquiring Hong Kong-based broadband company HKBN for HK\$6.86bn (US\$882mn), offering HK\$5.23 per share, a 7.6% premium to HKBN's last close. This follows a competing offer from private equity firm I Squared Capital. The acquisition would expand China Mobile's footprint outside mainland China. HKBN's shares have surged by 13% since China Mobile's interest began. (The Edge Malaysia)
- In 2024, major cable providers like Comcast and Spectrum have raised prices, with some customers facing hikes of up to \$20 per month. Spectrum's increases include a higher broadcast TV surcharge and price jumps for its packages and streaming service. Comcast's hikes cover TV service, broadcast fees, and internet, with some customers seeing bills rise by over \$20. These increases are attributed to rising content costs, fueling further migration to streaming services, though those are also raising prices.(Cord Cutters News)
- The 2024 presidential election reshaped cable news viewership, with Fox News Channel (FNC) leading with 62% of total day viewers, marking its largest audience share ever. FNC saw significant growth, while MSNBC and CNN lost viewers. MSNBC dropped 22% in primetime viewers, and CNN experienced a 13% decline. The shift reflects political events influencing media consumption, with viewers favoring networks aligned with their political views.(Cord Cutters News)
- Vodafone and Three have been cleared to create the UK's biggest mobile operator after committing to
 address concerns around network upgrades and price hikes. The proposed £16.5 bn merger (about \$20.9
 bn) was approved by the Competition and Markets Authority (CMA) following months of regulatory scrutiny, and
 is expected to be completed in the first half of 2025.(The Verge)

Capital Market Updates

A majority (58%) of public pension and sovereign wealth funds plan to increase infrastructure
allocations in the next 12–24 months, per OMFIF's 2024 report, up from 53% last year. About half aim to
boost private credit, while 40% target public and private equities. India leads as the most attractive emerging
market (58%), with Brazil second (17%). Notably, no respondents favored China this year.(Pensions &
Investments)

Cloud/DataCenters/IT Infrastructure

- Iliad Group is partnering with InfraVia, selling a 50% stake in OpCore, its €860M-valued datacentre unit, to fuel European expansion. They plan €2.5B in investments over 10 years, starting with a 100MW datacentre in Paris and scaling to "hundreds of megawatts" across Europe. Targeting the booming hyperscale cloud and AI markets, OpCore aims to become Europe's leading independent datacentre platform.(TelecomTV)
- Meta is requesting proposals for 1-4 GW of new nuclear energy capacity, aiming to support its Al and sustainability goals. The company seeks developers who can build multiple reactors to reduce costs, with initial proposals due by Feb. 7. Meta is open to large-scale and small modular reactors, aiming for reliable, long-term partnerships to meet its data center energy needs starting in the 2030s.(Utility Dive)
- Wind River® will provide core-to-edge cloud infrastructure for Boost Mobile's network, marking the
 telecom industry's largest containers-as-a-service (CaaS) vendor switch on an Open RAN network.
 Utilizing the Wind River Studio Operator platform, it will offer cloud-native, Kubernetes-based architecture for
 managing distributed edge networks, automating service deployment, and utilizing Al/ML for intelligent decisionmaking.(THEFASTMODE)

Crypto/Blockchain/web3/NFTs

- Bitcoin (BTC) and Ethereum (ETH) are surging due to positive sentiment, driven by the procryptocurrency stance of US President-elect Donald Trump. Bitcoin's ETFs hit a record \$6.5bn in net inflows, with predictions for BTC to reach \$100,000 or more. Ethereum has outperformed BTC, with its ETFs seeing \$1.1bn in inflows, led by BlackRock. Both cryptocurrencies are benefiting from investor optimism and regulatory expectations, though BTC struggles to break the \$100,000 resistance. Additionally, Bitcoin's supply on exchanges is decreasing, raising speculation about potential market shifts.(Bitcoinist.com)
- RTFKT, the NFT project most known for its attempt at making "digital shoes" a thing, is shutting down, according to a statement The project, acquired by Nike in 2021 for an undisclosed sum, plans to fully unwind by the end of Jan., though its Ethereum-based tokens will remain accessible. Launched in 2020 amid the beginnings of the mania around NFTs and the metaverse, RTFKT quickly garnered a reputation as a fast-moving startup.(SLASHDOT)

Cybersecurity/Security

- A Chinese hacking campaign targeting US telecoms, including AT&T, Verizon, and Lumen Technologies, is larger than previously known. Hackers accessed call records and specific phone calls, focusing on individuals in Washington, D.C. The FBI is notifying affected parties, including those from the Harris and Trump campaigns and Senate Majority Leader Schumer's office. (NBC News)
- Nick Clegg, Meta's president of global affairs said that the attempt to spread propaganda or false content in Facebook and Instagram largely failed. He said that Meta was able to quickly label or remove Algenerated misinformation. Despite widespread concern that generative Al could interfere w/ major elections around the globe this yr, the technology had limited impact across Meta platforms' apps, he said.(The Economic Times)
- T-Mobile has confirmed it was the target of a recent cyberattack, but assures customers that its defenses successfully prevented any compromise of sensitive information. The attempted intrusion comes amidst a wave of cyberattacks targeting telecommunications cos, attributed to a group known as "Salt Typhoon," believed to be linked to Chinese state-sponsored operations.(Cord Cutters News)

eCommerce/Social Commerce/Retail

- Best Buy expects prices to increase for US consumers if tariff hikes are implemented under Presidentelect Donald Trump, according to CEO Corie Barry. The electronics retailer will bring some products in ahead of any potential tariffs, and it is also planning out its vendor and SKU assortments and promotional and pricing strategies. New tariffs could also impact Best Buy's sourcing from Mexico, a country which accounts for its second-highest total of imports after China.(Supply Chain Dive)
- Black Friday 2024 set e-commerce records, with US sales reaching \$10.8bn (Adobe) or \$17.5bn (Salesforce), and global sales hitting \$74.4bn. Mobile accounted for 55% of U.S. online spending, with toys, electronics, and TVs heavily discounted. Chatbot-driven traffic surged 1,800%, with 20% of surveyed U.S. consumers using AI bots for deals. (TechCrunch)
- Lululemon reported a 9% YoY sales increase, driven by a 25% international sales surge, despite a 2% U.S. comparable sales drop. Q3 earnings of \$2.87/share and \$2.4B revenue beat expectations. Holiday guidance reflects cautious optimism, with expected revenue of \$3.48–\$3.51B. (CNBC)
- Off-price retailers have an advantage over competitors in the face of rising tariffs. Their sourcing model, which relies heavily on offloading excess inventory, shields them from tariff costs. With low direct imports, off-pricers like Burlington and TJX are insulated from tariffs, and any market disruptions could boost their inventory availability. Additionally, off-pricers maintain price advantages, which could widen as full-price retailers raise prices to offset tariffs.(Retail Dive)
- Some retailers have annc'd policy changes or stricter messaging toward people abusing their returns systems. Target updated its website to say it could deny returns for "fraud, suspected fraud or abuse". REI, which offers a generous one-yr return window for members, told Retail Dive that the co is targeting less than 0.02% of its members who, on avg, returned \$2,400 worth of gear over the past yr, or 79% of their purchases, the majority of which came back used.(Modern Retail)
- Temu is expanding its UK-based supplier network under a "local" initiative to shorten delivery times to as little as one day for bulky goods like furniture and appliances. The app, used by 12.1mn people, plans a London office to support growth. Meanwhile, it faces EU scrutiny over alleged illegal goods and lax oversight of rogue traders.(Retail Gazette)
- The EU is preparing a crackdown on the growing flood of packages from Asian online retailers such as Temu and Shein, following a big increase in ecommerce that largely evades EU custom checks.

 Measures under consideration include a new tax on ecommerce platforms' revenue and an administrative

handling fee per item that would make most shipments less competitive, according to people familiar with the discussions.(ResetEra)

- TikTok Shop saw more than \$100mn in sales on Black Friday. TikTok launched its Shop e-commerce platform in the fall of 2023 and has been pushing its creators and sellers to adopt the live shopping format which drives billions in sales in other markets, like China. US shoppers participated in more than 30,000 live shopping streams.(Benzinga)
- Walmart CEO Doug McMillon expects food inflation to remain steady into 2025, driven by eggs and dairy. Food prices have risen 25% since pre-pandemic levels, with processed items unlikely to drop significantly. While general merchandise prices near pre-pandemic levels, Walmart maintains optimism due to strong inventory and pricing strategies. Walmart+ memberships are growing, and high-income consumers now make up 75% of its U.S. share gains.(Retail Dive)
- Whole Foods is expanding its small-format Daily Shop stores in urban areas, starting with a successful location in Manhattan. These 7,000-14,000 square-foot stores cater to fill-in shoppers and offer a similar selection to larger Whole Foods locations. The company plans to open more in New York and Washington, D.C., aiming to meet demand in dense neighborhoods despite operational challenges.(Yahoo News)

Electric & Autonomous Vehicles

 Hong Kong has taken a major step in its smart mobility ambitions, issuing its first pilot license for autonomous vehicles to Baidu Apollo. The region's transport department anno'd the approval on Nov. 29, granting Baidu permission to trial up to ten self-driving vehicles on specified roads in North Lantau. Each test will feature a single autonomous private car operating along a route that includes the Hong Kong International Airport and surrounding areas.(KrASIA)

Film/Studio/Content/IP/Talent

• Maxtime Pictures' Her Story, a comedy-drama led by Shao Yihui, topped China's box office for a second weekend, earning \$19.8mn for a \$54.6mn total. Disney's Moana 2 debuted second with \$6.6mn, part of a \$300mn global weekend. Other films included Crayon Shinchan (\$3.6mn), Good Luck (\$3.5mn), and Maharaja (\$2.5mn). The weekend box office hit \$47.4mn, with 2024 totals down 20.9% year-over-year.(Variety)

Last Mile Transportation/Delivery

- Swiggysaid that it has expanded its 10-minute food delivery svs, Bolt, to more than 400 cities and towns across the country. The startup, which went public last month, said it has partnered w/ over 40,000 restaurants, including global chains KFC, McDonald's, and Starbucks, as well as popular local establishments for the 10-minute food delivery svs. Bolt offers items that require minimal to zero preparation time and covers restaurants w/in a 2-kilometer radius of customers.(TechCrunch)
- Thousands of delivery drivers in Spain working for the food delivery app Glovo will soon be full
 employees after the co annc'd that it was moving to an employment-based model. The decision follows yrs
 of pressure from the Spanish govt to give app-based drivers labor contracts. In a statement, Glovo's Berlinbased parent co Delivery Hero, said Glovo is moving from a freelance model to an employment-based one to
 avoid legal uncertainties, and that it anticipated a related 100mn euro (\$105mn) hit to earnings in 2025.(ABC
 News)
- Uber has 30 days to require certain drivers to get fingerprinted if the Co intends to continue transporting unaccompanied teens in California. The California Public Utilities Commission issued a ruling that requires taxi and ride-hail drivers who are carrying unaccompanied minors in the state to pass a fingerprint background check. The co has argued that its current name-based background checks and other guardrails are sufficient, and that such an inconvenient step would discourage drivers from signing up to the platform.(TechCrunch)

Macro Updates

- Federal Reserve Chair Jerome Powell said that a healthy job market and unexpected strength in the economy give policymakers time to mull the pace of future cuts to the benchmark interest rate. "The economy is strong and it's stronger than we thought it was going to be in Sept.," when the Fed began reducing borrowing costs from a two-decade high, Powell said. "The labor market is better, and the downside risks appear to be less in the labor market," he said during a webcast.(CFO Dive)
- For the first time since 1960, the number of live births in the EU has fallen below 4mn, one of the lowest fertility rates in the world. In 2022, the number of live births in the European Union reached its lowest level since 1960, according to the latest available data. That year, only 3.88mn babies were born in the EU, marking the first time the figure fell below 4mn. While the highest fertility rate is observed in France, a Mediterranean country, other Mediterranean nations have notably lower rates.(euronews)

- In November, several multibillion-dollar hedge funds capitalized on the US presidential election volatility, leading global hedge funds to gain 1.46% for the month and 10.6% year-to-date. Notable performers included SoMa Equity Partners (+9.5%), Discovery Capital (+14.5%), and Cinctive Capital (+5.1%). Citadel and Schonfeld both saw 1.8% growth, while the Winton Fund gained 0.3%.(Khaleej Times)
- Three Federal Reserve officials have made clear they expect the US central bank to continue cutting
 interest rates over the next yr but stopped short of saying they are committed to making the next
 reduction later this month. Fed governor Christopher Waller, addressing a conference in Washington, said he
 was inclined to vote to lower borrowing costs when Fed officials gather on Dec. 17, but added that data due
 before then could make the case for holding rates steady.(Australian Financial Review)

Media Conglomerates

• Paramount's leadership structure will change after its \$8 billion merger with Skydance Media, with two of its co-CEOs likely being pushed out. Skydance CEO David Ellison will lead the combined company, possibly consolidating Paramount's TV assets. Co-CEOs Chris McCarthy and George Cheeks may remain, but Brian Robbins, overseeing Paramount Pictures and Nickelodeon, is expected to depart.(New York Post)

Metaverse/AR & VR

 James Cameron is teaming up with Meta to bring more premium content to its Meta Quest mixed reality headsets. The Avatar, Terminator and Titanic director's Lightstorm Vision has cut a deal with Meta to "scale the creation of world-class 3D entertainment experiences spanning live sports and concerts, feature films, and TV series featuring big-name IP on Meta Quest." (The Hollywood Reporter)

Regulatory

- A potential split of Google 's biz is still under consideration, according to Teresa Ribera, the European Union 's new competition chief, who also pledged to build bridges w/ incoming US President Donald Trump. Ribera, a Spanish socialist who started her five-yr term, said in an interview w/ Bloomberg TV that divestments touted by her predecessor Margrethe Vestager and the US DoJ for the Alphabet unit are one way of preventing Big Tech firms grabbing too much market power.(The Economic Times)
- President-elect Donald Trump has selected Gail Slater, an Oxford-educated economic policy adviser to Vice President-elect JD Vance, to head up antitrust enforcement at the Justice Department. Slater was a tech policy adviser on the National Economic Council during Trump's first term, and has been advising his transition team on antitrust and tech policy. Earlier she spent 10 yrs at the US Federal Trade Commission, including as an adviser to former Democratic FTC Commissioner Julie Brill.(Stars and Stripes)

Satellite/Space

- Cadence Design Systems and AST SpaceMobile announced their collaboration on the AST5000 ASIC, a
 custom low-power chip driving AST SpaceMobile's next-gen BlueBird satellites. The chip, developed with
 Cadence's advanced tools and IP, boosts processing bandwidth tenfold, enabling space-based cellular
 broadband for smartphones. Cadence's Palladium Emulation Platform ensured design integrity, supporting
 AST's mission to bridge global connectivity gaps.(BUSINESSWIRE)
- Globalstar has annc'd that the FCC has issued a radio station authorization to GUSA Licensee LLC granting it a 15-yr renewal of its authority to operate numerous categories of mobile earth terminals with its U.S. and French-licensed NGSO satellites throughout the United States and its territories. The reauthorization includes Globalstar's ability to continue to expand its ancillary terrestrial network footprint as well as support the users who rely upon Globalstar for critical direct-to-device connectivity.(VanillaPlus The global voice of Telecoms IT)
- SpaceX is in talks to sell insider shares, which could increase the company's valuation to around \$350bn, significantly higher than the \$255bn valuation considered last month. This would solidify SpaceX as the most valuable private startup globally. The ongoing discussions involve a secondary offering, allowing employees and early shareholders to sell shares, offering liquidity.(The Edge Malaysia)

Social/Digital Media

• Fidelity marked up the value of its holdings in Elon Musk's X (formerly Twitter) by 32.37% in Oct, according to a report in Axios. Axios reports that this move is probably connected to xAI — Fidelity invested in the Musk-founded AI startup's \$6 bn Series B earlier this yr, and the firm also marked up its xAI shares by 70% in Oct. xAI's chatbot Grok was trained on X data and is available to X subscribers; X may also have a significant equity stake in xAI.(TechCrunch)

- Meta plans a \$10bn, 40,000+ km subsea cable project to strengthen global internet infrastructure and support its platforms and Al initiatives. The first fully-owned cable will enhance service reliability, bypass geopolitical risks, and prioritize India, a key market for Meta. The project aims to ensure quality traffic delivery while exploring Al training and data center opportunities in India.(TechCrunch)
- Meta's Instagram Threads, an X competitor, is rolling out improved search features, allowing users to filter by profiles and date ranges. Though less advanced than X's search, it aligns more with Bluesky's functionality. Threads has also added features like default feeds and Starter Packs to counter Bluesky, which has grown to 24M users, driven by discontent with X's policies under Elon Musk.(TechCrunch)
- Threads is testing the ability for its users to see how well their individual posts performed on the social network. Up until now, Threads' "Insights" feature only showed you aggregated metrics for all of your posts. The latest change comes as Meta has been rapidly building out and updating Threads over the past few weeks, likely in response to the increasing popularity of X competitor Bluesky, which recently surpassed 20mn users. (TechCrunch)

Software

- Salesforce shares rose 9% after its Q3 earnings report exceeded expectations. Revenue was \$9.44 billion, surpassing estimates of \$9.34bn, and the company forecast Q4 sales between \$9.90bn and \$10.10bn. Salesforce raised its fiscal 2025 revenue guidance, expecting \$37.8bn to \$38bn. CEO Marc Benioff highlighted the success of Agentforce, Salesforce's Al-driven platform, for transforming customer interactions.(CNBC)
- ServiceTitan has set an IPO price range of \$52 to \$57 per share, aiming to raise up to \$514.2mn. The company plans to use about \$311mn to buy back nonconvertible preferred stock and pay unpaid dividends. This is part of a strategy to clean up its cap table. Despite narrowing losses, ServiceTitan may price higher than the range to create positive market buzz. Additionally, 5% of shares will be sold to friends, family, and select C-suite decision-makers of its customers.(TechCrunch)

Sports/Sports Betting

- A month into the season, the NBA's ratings are down 28% on ESPN through Nov 21. The ratings for its games on TNT are flat at 1.8mn viewers per game, while ESPN is slightly behind at 1.77mn viewers per game. (TheWrap)
- Amazon Prime Video's exclusive Black Friday broadcast of the Raiders-Chiefs game saw a significant 41% increase in viewership, averaging 13.51mn viewers. The stream peaked at 17.43mn viewers, up 56% from last year's game. Additionally, Prime's viewership among 18-to-34-year-olds grew 43%. The NFL also achieved record-breaking Thanksgiving Day TV viewership, with its three games averaging 34.2mn viewers. (Front Office Sports)
- DAZN, the sports streaming platform, has been confirmed as the exclusive global broadcaster of the FIFA Club World Cup 2025. The agreement, worth a reported €1bn, will see all 63 matches at the tournament, which involves 32 of the best clubs worldwide, live-streamed, free to view on DAZN worldwide, w/ the possibility of sublicensing to local free-to-air linear broadcast networks. This includes integrating FIFA, FIFA's library of football moments and full-match replays on the DAZN platform.(ADVANCED-TELEVISION)
- Disney+ now features an ESPN tile, allowing ESPN+ subscribers to access sports content directly within the Disney+ app. Starting next fall, ESPN's flagship service will grant full ESPN access through this integration. Disney+ users will also get 100 live games annually without needing ESPN+, alongside select ESPN shows, films, and new exclusive content like a daily SportsCenter and a women's sports show.(CNBC)
- FanDuel Sports Network will continue to air Kansas City Royal games for the upcoming 2025 MLB season after the two sides were able to come to an agreement. "Our top priority has been and always will be reaching as many fans as possible," said Royals Chairman and CEO John Sherman. "We want to be available to anyone who wants to watch our exciting team as the ownership group continues to invest in the progress we're making on the field." As part of the new deal, FanDuel Sports Network Kansas City will continue to be the home of Royals TV.(Cord Cutters News)
- Netflix is considering adding ESPN NFL analyst Mina Kimes to its Christmas Day NFL broadcast team.
 The streamer, which paid \$150 million for two games, has already secured lan and Noah Eagle for play-by-play.
 Kimes' role would likely be studio-based, though no official deal has been finalized. The broadcast will feature games between the Chiefs, Steelers, Ravens, and Texans.(Awful Announcing)
- Robinhood CEO Vlad Tenev said that the brokerage firm is considering expanding into sports betting in some way. "We're keenly looking into that space. Nothing to announce just yet, but it's so important to our customers and in culture that we're excited about it," Tenev said at Robinhood's inaugural investor day event. (CNBC)

• The Giants-Cowboys game on Thanksgiving Day, which aired at 4:30 pm ET on Fox, drew 38.5mn viewers, 7mn+ more than the previous season-high of 31.2mn for Chiefs-Bills in Week 11. Despite the big number, subpar seasons for Dallas and New York may have contributed to the game attracting the lowest viewership for a Cowboys game on Thanksgiving since 2020—including an all-time regular-season record of 42.2mn viewers in a 2022 matchup between the same two NFC East rivals.(Front Office Sports)

Tech Hardware

- Al chip leader Nvidia could put its growing cash pile to use through possible mergers and acquisitions, finance chief Colette Kress said during a technology conference in Arizona. "We can also think about that in terms of our work, of bringing on great teams in some M&A form," she said at the UBS Global Technology and Al Conference.(Investing.com)
- BYD, known for its electric vehicles, is now assembling over 30% of Apple's iPads, employing over 10,000 engineers and 100,000 workers for this task. Despite being an EV company, BYD's expertise in software, batteries, and chips aligns with iPad production. The company also manufactures for Huawei and has worked with Apple since 2009. (Yahoo Tech)
- Chinese cos should be wary of buying US chips as they are "no longer safe" and buy locally instead, four of the country's top industry associations said in a rare coordinated response to Washington's curbs on Chinese chipmakers. The industry association warnings came after the US launched its third crackdown in three yrs on China's semiconductor industry, curbing exports to 140 cos, including chip equipment maker Naura Technology Group. Their advice could affect Nvidia and Intel which have managed to keep selling products in the Chinese market. (The Business Standard)
- Intel CEO Pat Gelsinger retired on December 2 after the board reportedly lost confidence in his efforts to
 revitalize the company. Tensions are said to have escalated over Intel's struggles to regain market share and
 compete with NVIDIA. Gelsinger, who returned to Intel in 2021 with a plan to restore its leadership, faced
 setbacks, including declining PC demand and delays in launching a competitive AI chip. Interim co-CEOs David
 Zinsner and Michelle Johnston Holthaus will take over while the board searches for a successor.(TrendForce
 News)

Towers/Fiber

- TIM and Ardian's Impulse I consortium have completed the sale of TIM's remaining 10% stake in Daphne 3, which owns 30.8% of INWIT. Based on an INWIT share valuation of €10.43, TIM received ~€250M from the deal, excluded from 2024 net debt guidance. The transaction adhered to Antitrust and Golden Power regulations.(THEFASTMODE)
- Vodafone, the parent co of Vodafone Idea Limited, annc'd that it will sell 3% stake in Indus Towers to clear its debt of \$101mn. The residual amount will be used to pay outstanding dues of its Indian venture, Vodafone Idea. Following this transaction, Vodafone's stake in Indus Towers will fall below 1%.(The New Indian Express)

Video Games/Interactive Entertainment

- A new report from Midia Research reveals that gamers spend an average of 7.4 hours a week playing video games and 8.5 hours watching game-related content. The study suggests that game publishers are missing out on potential revenue by not integrating more video content into games. The report proposes in-game video ads as a new revenue stream for developers.(Kotaku)
- PlayStation's co-CEO Hermen Hulst believes AI has the potential to "revolutionize" gaming, but emphasized it will never replace the "human touch" in game development. He predicts a future where both AI-driven experiences and handcrafted content will coexist, stressing the importance of balancing AI innovation with the creative input of human developers. (Yahoo News)
- Ubisoft will shut down its free-to-play shooter XDefiant by June 3, 2025, after struggling to attract and retain players. The game will no longer be available for download, and player registration will close. Ubisoft is laying off nearly 300 employees, with some of the production team moving to other roles. Players who purchased the Ultimate Founder's Pack will receive refunds. Ubisoft cites challenges in the competitive FPS market.(Polygon)

Video Streaming

• Discovery annc'd that it is testing 24/7 linear channels on its Max streaming platform. A small group of adfree Max subscribers in the US will have access to these channels, which mirror programming found on traditional HBO linear channels. (Cord Cutters News)

- Netflix's subscriber count in Japan reached 10mn in the first half of 2024, doubling from four years ago.
 The company has enhanced its studios and content production to strengthen its local presence. Netflix aims to become integral to Japanese life by expanding into areas like sports and comedy livestreams. Additionally, the company is improving production practices by limiting shooting hours and ensuring time off for employees(MarketScreener)
- WBD is gearing up to tackle password sharing on its streaming platform, Max. The co will begin sending out "early, gentle messaging" to users suspected of sharing their accounts w/ others outside their households. (Cord Cutters News)

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