Grassroots Research® Market Monitor

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Corporate Datacenter Trends in the US

To gauge US companies datacenter trends, Grassroots® commissioned interviews with enterprise IT experts familiar with the evolution of Al strategies and the role of colocation datacenters. All agreed that thirdparty services such as Azure, Amazon Web Services (AWS), and Google are being commonly used for AI training and inference, while the type of cases companies are doing with Al are mixed. On renting or using data centers from Equinix or another colocation vendor for AI training and inference, among those who commented, most said it would be prohibitive for the majority because of the cost to buy Nvidia powered servers.

Among sources who commented, 70% said cost will be a key factor in how Al architecture evolves over the next 3 years in terms of moving from using Azure or AWS to an enterprise's own hardware. One source said, "The primary concerns for customers revolve around data security, compute costs, and compute availability. Currently hyperscalers are well-positioned due to spikes in training compute demands. However, in the

long term, as the focus shifts more towards inference rather than training, it's conceivable that enterprises may move towards on-premises compute solutions to ensure data privacy and, in some cases, to mitigate compute costs."

Furthermore, among sources who commented, 100% agree a public cloud is the most cost effective and meets the data security needs for most companies. One said, "Privately hosting large language models (LLMs) is ridiculously expensive once you factor in failover and concurrent user access. There is also still quite a level of trust with companies such as AWS, Google, Oracle & Azure for using bare computer and other services, no concerns over data being read by the third party. Open AI has certainly made moves to convince people that their data is their own and doesn't contribute towards model retraining. The wording is still a bit shady though, and I don't believe that there is the level of trust there necessary for customers to send sensitive data to such a service as part of a production system. I don't believe those kinds of services will ever gain



that level of trust."

On moving to a private/hybrid cloud approach, among the sources who commented, 89% said the benefit of it for AI is greater control over security for critical data. One source said, "It all depends on the cost and how tightly you want to clutch your pearls, or if your contract requires it. There is not one answer for all. If there is a breech the closer you control the data the easier to get answers, but there is the cost, a huge cost to doing AI in a private cloud or hybrid approach."



Impact on consumers from Bitcoin ETF launches—US

Following the SEC's approval of Bitcoin Exchange Traded Funds (ETFs) early this year, Grassroots® commissioned interviews with US consumers to gauge their interest in Bitcoin and cryptocurrency investing. Of those interviewed, 76% said they either don't know much about Bitcoin or have never invested in it. Of those who have never invested in Bitcoin, 32% said they were likely to invest in it in the next 6 months.

Of those interviewed, 17% do own cryptocurrency and the Bitcoin ETF, and 7% own the Bitcoin ETF only (don't own cryptocurrency directly). Of these, 78% think their Bitcoin purchases will be done by buying Bitcoin directly (on an exchange), and 22% said buying the Bitcoin ETF directly.

60% think the advantages of buying cryptocurrency/Bitcoin directly vs. an ETF are direct ownership, while 37% said its safer as (they can store it themselves, and 24% said do not have to pay ETF fees.

Of those that only own the Bitcoin ETF, 42% said they have never owned Bitcoin directly because the price was too expensive, while 32% said it was too intimidating opening an account on a Bitcoin exchange, and 30% said they did not fully understand how cryptocurrency and Bitcoin work. 92% think it is likely they will purchase Bitcoin directly through an exchange. 46% said direct ownership is the advantage of buying cryptocurrency / Bitcoin directly compared to an ETF, while 34% said it's safer, and 32% said you don't have to pay fees.

Cybersecurity channel spending outlook-US

To gauge cybersecurity spending trends, durability and preferred vendors in the US, Grassroots® commissioned interviews with sources from cybersecurity valued-added resellers and distributors who work with a variety of vendors. Eighty percent of sources expect their average client's security spending to increase in the next 12 months, while 20% expect spending to remain flat.

The biggest drivers of spending are the need for more advanced security to keep up with more advanced threats, including AI, and compliance requirements. One source commented, "Security spending will continue to increase due somewhat to AI, not only as a great tool and solution but also as a hindrance. The industry is having to develop tools to defend against AI. Another factor is any cyber insurance policy is going to require a certain level of coverage, forcing companies to spend on things like managed detection and third-party assessments."

According to sources, the top security vendors in the past six months in terms of innovation, technology, and overall offering were SentinelOne and CheckPoint, followed by Microsoft, Sophos, Blackpoint, and Threat Locker. Meanwhile interest in Al has not driven demand for cybersecurity products for 65% of sources, although this will change as Al becomes more widely used in productivity applications, while 35% of sources said it has already driven demand.

One source said, "There is a lot of buzz about AI not only from the standpoint of the risks but also the positives that AI can provide. The technology has been around for a while, but now it is getting scary. At the same time, more and better tools are being developed to protect against AI. I am starting to see products to defend against AI are being purchased at an increasing rate due to requirements of vendor contracts and cybersecurity insurance."

IT and AI spending— US



To gauge IT budget growth trends and priorities, and determine if AI spending is impacting other IT budget areas, Grassroots® commissioned interviews with senior IT and AI executives in the US. 50% of sources said overall 2024 IT budgets are up vs. 2023 budgets. while 42% said flat and 8% said down. At the same time, 38% of sources said Al represents an average 18% of their 2024 IT budget. Meanwhile, 73% of sources said they are taking no specific actions to make room for Al-related spending while 9% of sources said Al is cannibalizing IT spending. 9% of sources said clients are utilizing discretionary spend line items, and 9% cited a mix, including reallocation of funds within existing budgets, vendor consolidation, and borrowing from non-IT budgets.

As for Al investments in the past 12 months, 80% of sources said Al investments are demonstrating ROI that meets or exceeds their expectations, while 20% of sources they are either meeting, exceeding, or falling short. At the same time, 31% of sources expect to move an average of 27% of current and ongoing AI experiments into production. One source said, ""I would say that 30% of investments meet ROI goals, 20% exceed them, and 50% fall short. Al relies on excellent data quality as the input to your Al model. The higher the quality of the input data, the more accurate and reliable the results produced by the Al model will be. Many of the AI projects we've encountered lack a defined business goal or suffer from poor data quality as their inputs. Some firms are approaching Al cautiously or are launching data quality initiatives in 2024 to prepare for 2025 budgeted Al initiatives."

As to why AI experiments do not move into production, 62% of sources said the most common reason is budget restrictions and issues, while 15% said there is a lack of understanding of AI's capability, and 8% said that AI does not provide the required solution, and there are issues with complexity, risk, liability, lack of trust in AI, and data quality.

When asked if there are barriers to move AI projects into production, 25% of sources cited lack of personnel and talent to manage the project, lack of quality and completeness, and lack of understanding of AI's capability, while 13% of sources each cited lack of trust in the AI solution, time constraints, and budget issues.

Meanwhile, 13% of sources said that if testing is proven there would be no barriers to moving into production. One source said. "Budget and complexity are two of the top reasons. Someone may have a good idea for Al, but not know how much it costs to implement and/or the company may not have enough money to implement what they want. Or perhaps they don't understand the capability of AI and the complexity of what they are asking for and this could make their desired solution unfeasible." 45% of sources said they expect Al-related spending in 2025 to be up significantly, while 45% said up a little, and 9% of sources said flat. One source said. "Spending could go up a little to significantly. Companies that this year are monetizing GenAl will go into 2025 with a stronger sense of where they can make money and some or many will likely increase spend in 2025."

Online music industry survey-US

Grassroots® surveyed consumers in the US who stream music to gauge what are the most important, differentiating features and how much of a price premium they are willing to pay for specific platforms. 55% of sources said price is the most important factor when considering a music streaming service, 54% of sources said ease of use, and 46% of sources said the music catalog.

66% of sources said they use a paid music streaming service, while 34% do not. Of those sources who pay for streaming music, 59% of sources said ad free is the primary reason they do, followed by 44% of sources stating playlists, and 38% said the ability to listen offline. Of those that use a paid service, 38% of sources use Spotify, followed by 23% of sources who use Apple Music, and 19% use Amazon Music.

When asked about listening to podcasts, 65% of sources said they listen to podcasts. Of those sources that listen to podcasts, 39% listen to them 1-2 hours per day, while 35% of sources said less than 1 hour per day, followed by 25% of sources said they listen 2 or more hours a day. Furthermore, 50% of sources are willing to pay for podcasts. On a monthly basis, 63% of sources would be willing to pay \$0.99—\$2.99, while 37% would pay \$3.99—\$5.99.



GPU datacenter trends-US

To gauge Graphics Processing Unit (GPU) trends in datacenters, Grassroots® commissioned interviews with industry experts in the US. 100% of sources agree NVIDIA is the top provider of accelerated compute and networking with 67% noting Advanced Micro Devices (AMD) as a rising competitor and Intel as a minor competitor.

One source said, "NVIDIA dominates the high-performance computing (HPC) and Artificial Intelligence (AI) space for both GPU and networking. There are some smaller players and I do believe there will be a big push by big tech companies (Apple, Meta, Amazon, Google) to continue developing their own GPU and networking, but it's unclear how those would be released to the market for other OEMs and manufacturers. So, for now, it's all NVIDIA all the time."

67% of sources find AMD's GPU competitive to NVIDIA's in performance. power and scalability. One source said, "You have to understand why NVIDIA GPUs are so successful and to a large degree that is the software ecosystem (programming language, compilers, dev tools, etc.) that NVIDIA has fostered for many years. These cards are nothing without these software tools. So really the game is how quickly can AMD, Intel and others create the same type of ecosystem around their accelerators or potentially port the NVIDIA software tools to their own accelerators? AMD does have software tools, but NVIDIA created a vast ecosystem around theirs. AMD has yet to achieve nearly that level of success."

About Grassroots Research®

The Grassroots Research® division combines a variety of resources and methodologies, including in-house employees; a global network of independent, experienced journalists and consumer researchers; more than 50,000 industry contacts; and online panel surveys. We use this network to apply innovative market research and investigative journalism techniques to identify stock and sector trends before our competitors do.

Advantages:

- Continuous exchange of information between Grassroots® analysts and our investment professionals
- Expertise of independent journalists and consumer surveys to reach sources on the ground
- Technological tools to target consumer and business panels online
- Timely business insights via quick turnaround times
- 30+ years of experience conducting customized investigative market research around the world

Resources:

- Access to thousands of consumers in more than 50 countries via targeted online consumer and business panels
- On-the-ground investigators who conduct quantitative market research among consumers
- 55+ reporters who conduct interviews with industry experts
- In-house team based in the US
- 50,000+ industry contacts worldwide from a wide range of industries, including consumer, technology, healthcare, materials, industrials, energy and financial companies

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