Akash Network (AKT) Diligence Report

Prepared by: Mark Benhaim
Date: May 18, 2024

Table of Contents

Research Disclaimer

The information presented in this report is provided as general commentary and is authored by Mark Benhaim as an independent research effort. This report does not constitute financial, investment, legal, tax, or any other form of professional advice. It is not intended to recommend or endorse any specific investment strategies, financial products, or other services. The views and opinions expressed herein are based solely on publicly available information, data from reliable sources, or internal analysis believed to be accurate at the time of writing.

While diligent efforts have been made to ensure the accuracy and completeness of the information provided, the contents of this report are not guaranteed to be free from errors or omissions. The information contained within includes projections, forecasts, and other forward-looking statements, which are based on current market trends and conditions. These projections are subject to risks, uncertainties, and other factors that may cause actual results to differ materially from expectations.

No representations or warranties, express or implied, are made regarding the accuracy, completeness, or reliability of the information contained in this report. Mark Benhaim disclaims all liability for any loss or damage of any kind arising from the use of this report or reliance on any information contained herein, irrespective of any negligence, default, or lack of care.

This report is intended for private use and not for public distribution. Any reproduction, distribution, or dissemination of this report, directly or indirectly, in any form, is strictly prohibited without prior written consent from Mark Benhaim. This report is not directed to, nor intended for distribution or use by, any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation, or which would subject the author to any registration requirement within such jurisdiction or country.

All trademarks, logos, and brands mentioned in this report are the property of their respective owners and are used for identification purposes only. No endorsement or association is implied.

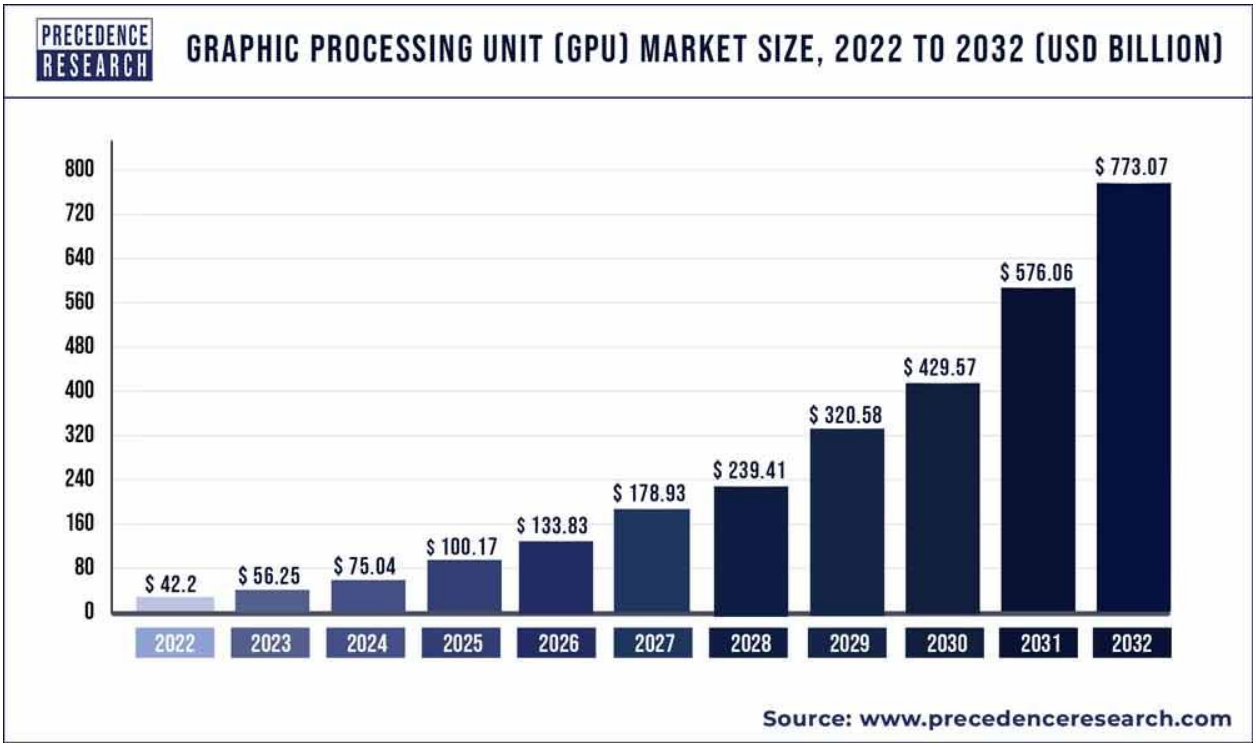
Executive Summary

Challenges and Innovations in Scaling AI

The artificial intelligence (AI) industry has experienced significant advances, with AI models not only growing in capabilities but also in complexity and size. Today's large AI models represent a crucial evolution in AI development, transitioning from excelling at singular, narrowly focused tasks to approaching more generalized capabilities across a variety of tasks. This scaling of model complexity is expected to continually improve AI performance while simultaneously increasing the consumption of computational resources, particularly during model training.

A vital resource in this context, Graphics Processing Units (GPUs), have become highly strategic and competitive. Capable of handling extensive parallel data processing, GPUs are essential for reducing latency of high-performance computing tasks, specifically machine learning model training, integral to AI development. This capability renders GPUs more suitable for AI applications than Central Processing Units (CPUs), which excel more in sequential processing. The increasing demand for GPUs, driven by larger AI models and compounded by supply chain and geopolitical challenges, has significantly raised the costs associated with AI training. For example, enterprises like OpenAI and Stability AI have spent millions on high-end GPUs to train their models, highlighting the substantial financial burden of AI development.

Figure 1: GPU Market Forecasted Compounded Annual Growth



This figure by Precedence Research showcases the projected compound annual growth rate

of the GPU market size in billions over a 10-year span up to 2032. Based on precedence statistics, the expectation is a CAGR of 33.8%, with the market increasing over 1000% in size by 2032.

In response to these escalating demands and costs, large tech companies have begun to amass GPUs not only to enhance their computing capabilities but also to capitalize on this growing market by offering these resources at premium prices. This situation places developers at a crossroads: either invest heavily in their own hardware to secure the necessary computational power or rely on cloud providers at exorbitant rates. Consequently, the development of sophisticated AI technologies has largely been confined to well-funded tech giants.

The AI race has thus intensified the need for scalable and accessible computing power, crucial for the continued advancement of AI technologies. Here, decentralized compute networks present a promising solution to these challenges. Emerging from the Decentralized Physical Infrastructure Network (DePIN) sector, these networks use blockchain technology to provide computing services in a decentralized and secure manner. Unlike traditional models, where processing power is centralized in a single location, decentralized compute networks distribute workloads across multiple nodes. This setup allows for parallel processing, enhancing scalability and efficiency.

Decentralized compute networks offer several distinct advantages for AI development:

- **Cost Efficiency**: By leveraging low-cost and idle resources globally, these networks can tap into cheaper and underutilized computing and storage resources, potentially reducing costs significantly.
- **Resilience Against Censorship**: The decentralized nature of these networks offers a robust counterbalance to the increasing concentration of AI development among a few large tech firms, promoting a more open and accessible environment for innovation.
- **Resource Utilization**: These protocols aim to utilize the unused computing power worldwide, fostering the creation of open-source models through compute incentivization.

Introduction to Akash Network

Akash Network is the world's first decentralized cloud computing marketplace, aiming to disrupt the traditional cloud computing industry by offering a decentralized, open-source alternative. This report evaluates whether Binance should list, invest in, or partner with Akash Network, considering various aspects such as demand, technology, competitors, team, tokenomics, and overall market positioning.

Akash Network stands at the forefront of the decentralized cloud computing domain as a groundbreaking platform. Its primary mission is to establish a decentralized marketplace for leasing computing resources, challenging conventional cloud service models.

Since its inception in September 2020, Akash Network has been making notable strides. Central to its ecosystem is the native cryptocurrency AKT. As of May 16, 2024, AKT's market price stands at approximately $5.75 per token. With a circulating supply of around 237 million tokens, this translates to a total market capitalization of $1.363 billion.

A testament to its growing impact and adoption, Akash Network boasts exemplary stats of over 184,000 leases to date. The network's capacity is impressive, featuring over 17K CPUs, 364 GPUs, 84TB of memory, and 753TB of storage. These metrics showcase the platform's robust infrastructure, immense growth over time, and its potential to revolutionize the cloud computing landscape through a decentralized concept.

Leadership and Fundraising

Akash Network raised $2 million in a venture round on March 30, 2020, a significant milestone for the company. This funding round was led by Cypher Capital and supported by a group of seven investors, including Digital Asset Capital Management, Zokyo, and Genblock Capital. The participation of these reputable investors highlights their confidence in Akash Network's potential.

Leading Akash Network is co-founder and CEO Greg Osuri, who has been involved in cloud architecture and entrepreneurship since 2008. Osuri's background includes founding multiple companies and holding key positions at prominent firms like IBM. His entrepreneurial achievements include founding AngelHack, the world's largest hackathon-based accelerator, and Overclock Labs, the main contributor to Akash. Before Akash, Osuri was an open-source developer specializing in container infrastructure and developer tools.

Joining Osuri in leadership is co-founder and CTO Adam Bozanich, who brings extensive software engineering experience. Bozanich has held senior roles in various tech fields and co-founded Sprouts Tech and Overclock Labs with Osuri, providing the technical expertise necessary to build Akash Network's foundation.

Overclock Labs played a crucial role in establishing Akash Network, which has since grown into a decentralized cloud protocol. While Overclock Labs continues to contribute significantly to Akash's codebase and development, it does not control the network's validators, ensuring the decentralization and integrity of AKT transactions.

Currently, Akash Network's source code is utilized by Amazon CLI. Since the project's inception, its GitHub repository has seen increased activity from external developers, indicating a broadening contributor base. This growth in external contributions reflects the project's thriving nature and commitment to decentralized development.

Osuri’s Lightbulb Moment: The Birth Of The Akash Network

Back in 2013, at an AngelHack hackathon event, Greg Osuri witnessed several prominent companies launched from the hack, one being Firebase. Firebase would eventually be acquired by Google, which became the Google Cloud database. It was at that exact moment that Osuri recognized a common problem among developers and that happened to be

deployment at scale. When you are at a hackathon, you have an idea, you can quickly build that idea and launch it in a matter of days or even hours, but then if you want to scale that out to real users, that tends to be a challenge both in terms of the technology landscape as well as the cost landscape.

Osuri discovered a new technology called Linux containers and found a significant use for these containers to solve a critical problem: scalable deployment. Thus, Osuri started his journey to bring scalable deployment computing to the masses, ideating and founding Akash Network. In the earlier years of deploying Akash Network's container-native solution, Osuri noticed another product called Kubernetes, which was a container orchestration solution.

At a time when nobody had heard of Kubernetes, Osuri was one of the core contributors with a degree of prominence showcased on GitHub, where his libraries committed were trending in the top 10 on Golang's coding language, integrating TensorFlow, a machine learning application by Google, to train the libraries. Through Osuri's contributions, he discovered that most of the computing power in data centers, upwards of 85%, was completely underutilized at a time when there was a shortage of GPUs available.

When the team was deploying their Kubernetes container, it was around the time when cloud-based containers began to get extremely prominent, showcased through what Netflix was able to demonstrate with its scaling solution of curated content. This trend led to every company being launched on the cloud, which enhanced their capabilities but also highlighted the concentration of power and the associated costs. Research papers such as "The Cost of a Cloud: The Trillion Dollar Paradox" discussed how 50% of your online fee for services like Netflix or Asana goes to a cloud provider, essentially a cloud tax that consumers are paying without realizing it.

The concept of a supercloud was starting to take shape in academic circles, envisioning a super layer on top of cloud providers that is decoupled from them where the control plane is in the user space and the resource plane is in the cloud provider space. This lightbulb moment triggered Osuri and the team at OverClock Labs to engage in deeper research, aiming to solve the critical problem of consolidating different cloud providers into a single federated viewpoint.

They decided to keep Akash Network's infrastructure open source, countering the trend of closed-source web2 cloud infrastructures. The challenge was to develop a sustainable model for open networks. In 2015, OverClock Labs started prototyping on Ethereum and published a research paper in 2017 that introduced the notion of a decentralized supercloud to Web3. They predicted the continuous rise in cloud and GPU costs, especially for resource-intensive activities like machine learning, and foresaw the prominence of companies like Nvidia in this space. The team aimed to tackle a multi-trillion dollar problem.

Demand / Need that the Project is Solving

The growing complexity and size of AI models demand substantial computational resources, primarily GPUs, for effective training and inference. Traditional cloud providers dominated by tech giants like Amazon, Google, and Microsoft offer these resources at high costs, creating a barrier for startups, developers, and researchers. This scenario underscores the need for a decentralized, cost-effective alternative that democratizes access to computational power.

Akash Network addresses this need by providing a decentralized marketplace where users can lease computing resources at competitive prices. This model not only reduces costs but also enhances resource utilization by tapping into idle computing power worldwide. By doing so, Akash Network democratizes access to high-performance computing, fostering innovation and enabling more entities to engage in AI development and other computationally intensive tasks.

Key needs Akash Network is solving:

- **High Costs of Cloud Computing**: By decentralizing cloud services, Akash significantly reduces costs, making high-performance computing more accessible.
- **Resource Underutilization**: Akash taps into idle computing resources, maximizing their use and contributing to a more efficient ecosystem.
- **Accessibility and Inclusivity**: The platform democratizes access to cloud computing, allowing smaller enterprises and individual developers to compete on a level playing field with tech giants.
- **Decentralization and Security**: By distributing workloads across multiple nodes, Akash enhances security and resilience against centralized points of failure and censorship.

Product and Technology

Akash Network is an open-source and decentralized cloud computing platform built using the Cosmos SDK and implemented on the Cosmos blockchain. It facilitates the deployment of cloud-native applications and enhances scalability and performance for decentralized applications and organizations.

Core Features

Akash Network offers several core features that differentiate it from traditional cloud providers:

- **Akash Marketplace**: A peer-to-peer cloud marketplace that connects users (tenants) with providers offering computing resources. The marketplace operates on a reverse auction model, allowing tenants to set their prices and resource requirements, while providers bid to fulfill these demands.
- **Deployment and Management**: Utilizes Kubernetes for efficient hosting and management of deployments. Supports Docker containers, ensuring consistent application operation across different environments.
- **Cost Efficiency**: Significantly cheaper than major cloud providers, with costs approximately ten times lower.
- **Security and Decentralization**: Censorship-resistant and permissionless, offering a secure and open environment for developers.
- **AKT Token**: Serves multiple purposes, including governance, security, and as a medium of exchange within the network. AKT incentivizes participation and ensures the smooth operation of the Akash marketplace.

Recent Milestones

Akash Network has achieved several significant milestones, including:

- **Mainnet 6 Launch**: Introduced the first decentralized GPU marketplace, enhancing the network's capabilities for AI and high-performance computing.
- **Akash ML**: Launched to offer GPU spot instances for AI developers, providing a competitive alternative to traditional providers with scarce high-demand GPUs like the H100.
- **Inter-Blockchain Communication (IBC)**: Akash supports IBC, allowing seamless integration with other blockchain networks and enhancing interoperability.
- **Mainnet Upgrades**: The network has undergone several notable upgrades recently to enhance functionality, including support for persistent storage, authorized spending, and stable payments.

Open-Source Decentralization and Developer Community

Akash Network's commitment to decentralization is exemplified by its open-source nature and the increasing participation of contributors

outside of Overclock Labs. Initially, Overclock Labs bootstrapped the Akash Network under the leadership of Greg Osuri and Adam Bozanich. Although Overclock Labs remains a principal contributor, it does not control the majority of the 100 validators on the network, ensuring the decentralization and integrity of AKT transactions.

Overclock Labs' role in Akash Network is primarily developmental, as it continues to contribute significantly to the open-source codebase. However, since 2020, there has been a notable rise in the commits from non-Overclock employees, indicating a growing and active developer community. A commit refers to any addition or change to the codebase and serves as an indicator of developer activity within a project. This increasing trend of contributions from external developers highlights Akash Network's decentralization and broad community involvement.

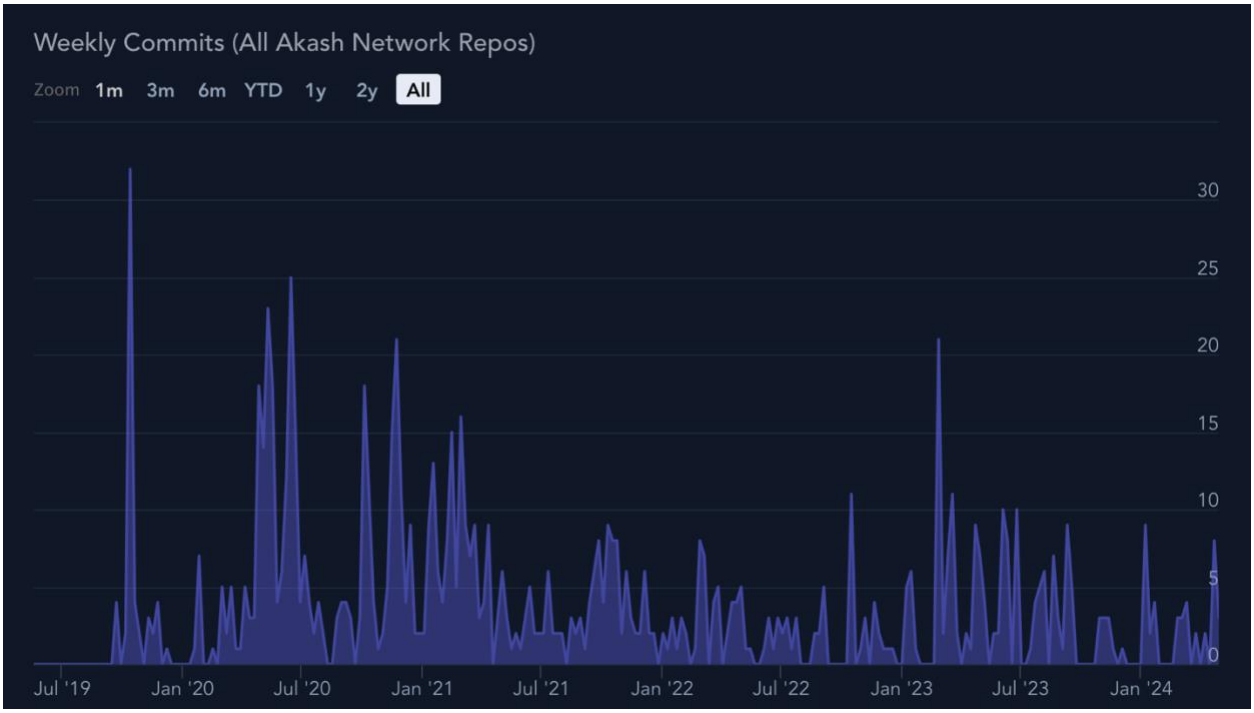
Akash Network's decentralized model and open-source approach allow for diverse contributions, fostering innovation and enhancing the robustness of the platform. The network's governance, driven by AKT token holders, further supports this decentralized ethos, promoting transparency and community involvement.

Developer and Social Activity

Developer Activity

Akash Network monitors 95 GitHub repositories for commits, code additions, and deletions, contributing to the Developer Rank. The network has seen contributions from a total of 652 developers over the past year, indicating robust and active development.

Figure 2: Weekly Commits Across Akash Network Github Repositories



Insight: This chart sourced from Stack Money shows the weekly commits for all Akash Network repositories, highlighting the continuous development activity. Akash Network's decentralized model, with its permissionless and open-source approach, has proven to promote diverse contributions among open-source developers, fostering innovation and

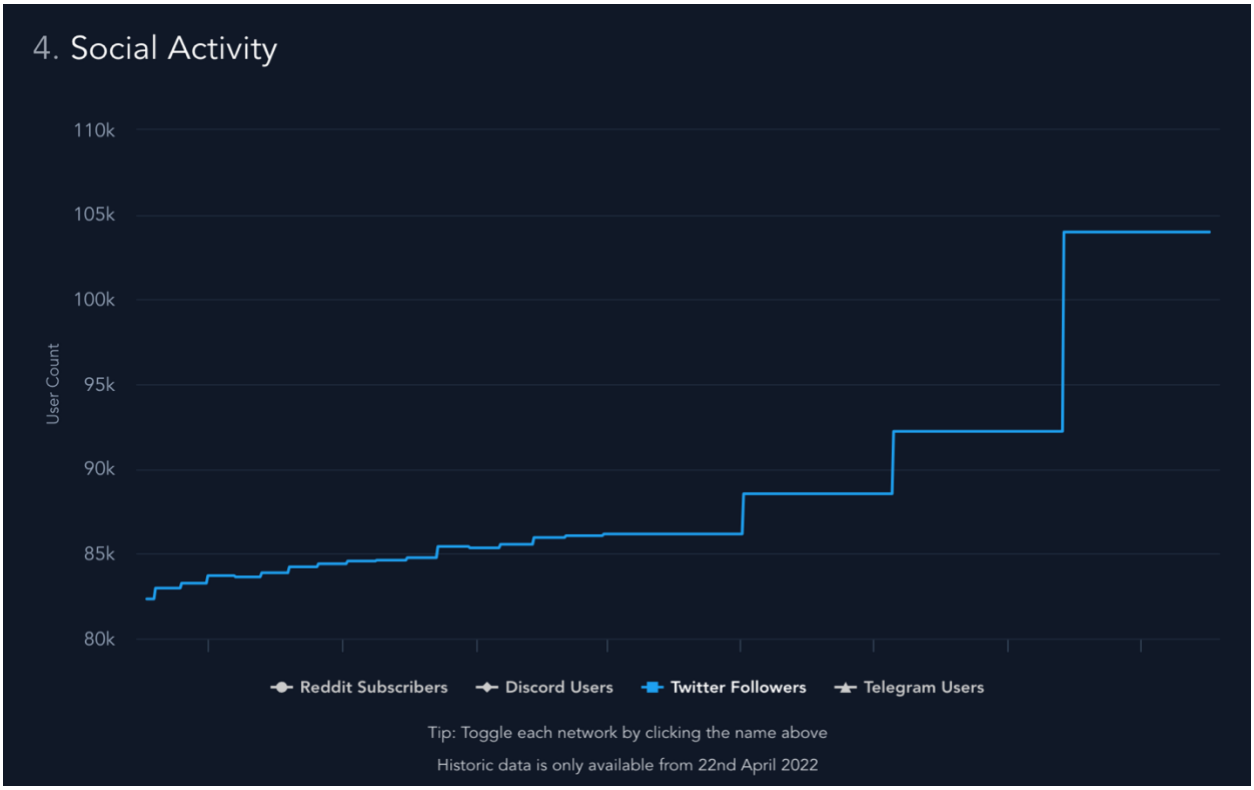
enhancing the robustness of the platform. The network's governance, driven by AKT token holders, further supports this decentralized ethos, promoting transparency and community involvement.

Social Activity

Akash Network maintains a strong presence across various social platforms, which is essential for community engagement and growth.

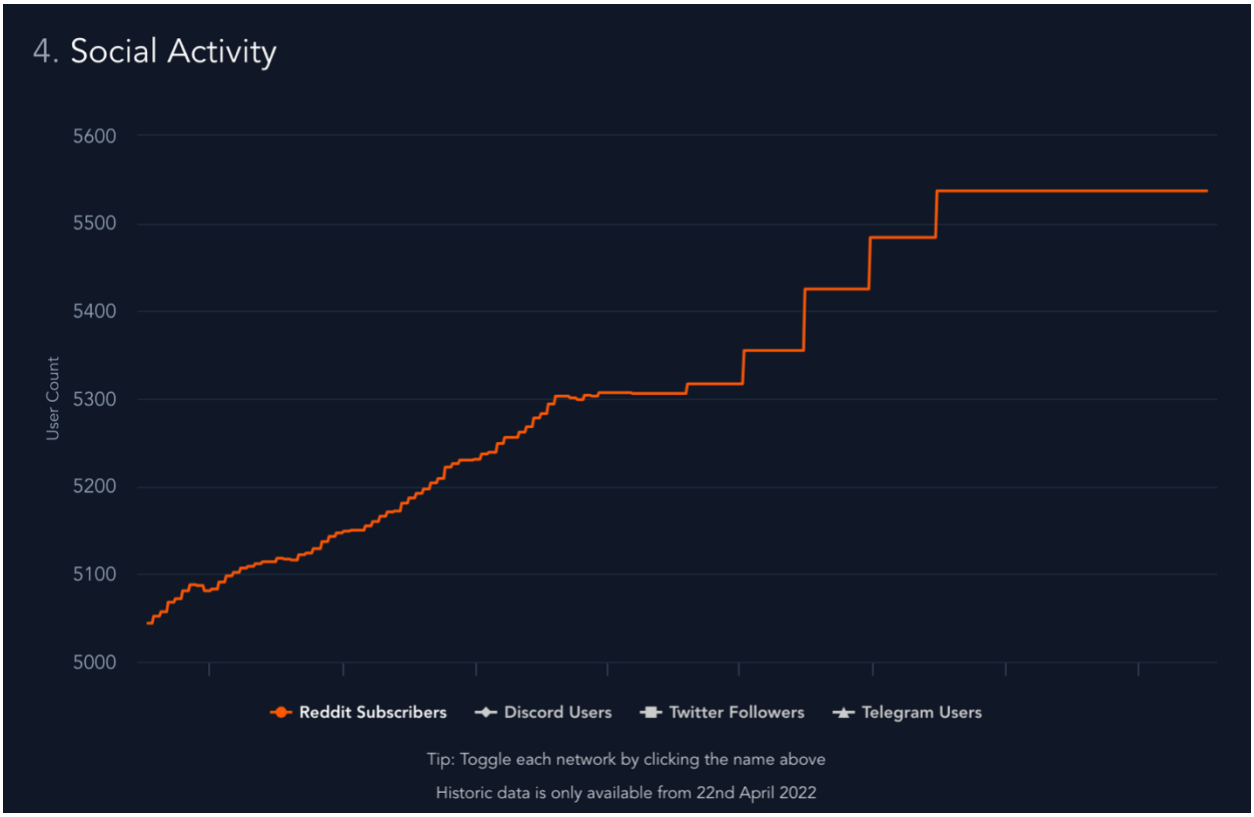
- **Reddit Subscribers**: 5537
- **Active Reddit Users (Past 24h)**: 6
- **Discord Users**: 15116
- **Active Discord Users**: 1046
- **Telegram Users**: 10270
- **Twitter Followers**: 103980

Figure 3: Twitter Followers Growth



and engagement with the Akash Network community.

Figure 4: Reddit Subscribers Growth



Insight: This chart shows the increase in Reddit subscribers, reflecting the expanding community on this platform.

Competitors

Akash Network operates in a competitive market with both traditional cloud providers and emerging decentralized solutions. Key competitors include:

- **Traditional Cloud Providers**: AWS, Google Cloud, Microsoft Azure dominate the market with established infrastructure and extensive service offerings.
- **Decentralized Compute Networks**: Emerging competitors like Render Network, Golem, and iExec offer decentralized computing solutions, each with unique features and focuses.

Comparison with Competitors:

- **AWS, Google Cloud, Microsoft Azure**: Akash offers significantly lower costs and enhanced security through decentralization, though it lacks the extensive service suite of these giants.

- **Decentralized GPU Leasing Competitors**: Akash differentiates itself with its unique marketplace model, cost efficiency, and focus on AI and high-performance computing. It maintains a first-mover advantage in the decentralized cloud computing GPU leasing space.

Landscape of Decentralized Compute Networks

The decentralized compute network market has seen substantial growth, coinciding with increased interest in AI and key AI-industry developments. This is reflected in the market cap of decentralized compute network tokens, which posted historic gains over the past year with Render Network and Akash Network leading the charge. Render Network had the largest market cap, surpassing $4 billion and posting a 3843% gain since January 2023. Akash Network has seen significant growth as well, from $23 million in January 2023 to $1.4 billion today equating to a 6087% increase.

Decentralized Compute

Decentralized compute networks provide unused computational resources like GPUs and create open computational marketplaces. With a focus on developing and providing infrastructure, these markets unlock a significant amount of new GPU supply and computational efforts, enabling anyone in the world to become a resource provider.

Decentralized GPU Leasing Competitors

The decentralized compute market is becoming increasingly competitive, with several notable projects emerging alongside Akash Network. These competitors vary in their approach, target audience, and technical capabilities.

- **Gaimin**: Utilizes the unused power of gaming PCs for rewards and global data processing.
- **Aethir**: Provides enterprise-grade GPU services for AI and gaming.
- **GPU.net**: A blockchain-based GPU network for decentralized resource sharing in AI.
- **ThreeFold**: Offers a decentralized global grid for storage, compute, and network.
- **io.net**: Focuses on decentralizing AI with an open marketplace and ethical practices.
- **Nosana**: Offers GPU cloud computing and CI/CD tools on the Solana blockchain.
- **Golem**: A decentralized marketplace for computing power, allowing users to rent out their idle CPU/GPU resources.
- **iExec**: Decentralizes cloud computing by enabling users to monetize their computing power and data.

- **Phala Network**: Provides a decentralized cloud computing service based on blockchain technology, with a focus on privacy.
- **Cudos**: A decentralized cloud computing platform that aims to provide lower-cost, scalable, and secure computing resources.
- **Exabits**: Offers decentralized cloud infrastructure and GPU leasing services for AI and machine learning applications.
- **Lilypad**: A decentralized platform for renting idle computing resources, with a focus on privacy and cost-efficiency.
- **Render Network**: A decentralized GPU rendering network that connects users looking for rendering power with those who have idle GPUs.
- **Flux**: A decentralized cloud infrastructure focused on providing scalable and secure compute resources.

Competitor	Permission Status	Open Source Status	Sector Focus	Total GPUs	Market Cap	FDV
Gaimin	Permissionless	Open source	Gaming	50000	$31,077,694	$468,843,705
Aethir	Permissionless	Open source	Gaming, AI	640000	Pending TGE	Pending TGE
Node AI	Permissionless	Open source	AI	389	$116,500,351	$123002729
ThreeFold	Permissionless	Open source	General purpose	264	$1,547,350	$19,060,390
io.net	Permissionless	Open source	General purpose, AI	100000	Pending TGE	Pending TGE
Nosana	Permissionless	Open source	AI	106	$444,990,000	$513,510,000
Golem	Permissionless	Open source	General purpose, AI	58000	$535,929,042	$535,592,993
iExec RLC	Permissioned	Open source	General purpose, AI	Unknown	$231,774,998	$278,122,694
Cudos	Permissioned	Closed source	General purpose	Unknown	$81,006,904	$138,635,492
Exabits	Permissioned	Closed source	General purpose, AI	65000	Pending TGE	Pending TGE
Lilypad	Permissionless	Open source	General purpose, AI	Unknown	Pending TGE	Pending TGE
Render Network	Permissionless	Open source	Rendering, AI	Undefined	$3,989,559,117	$5,511,168,372
Flux	Permissioned	Open source	General purpose, AI	7000	$311,873,374	$395524309

Competitor	Permission Status	Open Source Status	Sector Focus	Total GPUs	Market Cap	FDV
Akash Network	Permissionless	Open source	General purpose, AI	364	$1,398,152,343	$1,398,152,343

Analysis for Akash's Competitive Positioning

In 2023, io.net received important recognition at the Inventions Asia Awards, standing out from more than 110 Asian projects. Since the beginning of 2024, io.net has shown significant growth and engagement with a waitlist of over 100,000 GPUs, over 14,000 hours of compute services provided, over 20,000 GPUs registered on the network, and over 650 clusters successfully built.

Although platforms such as io.net and Akash are both committed to reforming traditional cloud computing in a decentralized manner, they focus on different industry market segments. Akash Network provides a broad marketplace of cloud resources using container technology, while io.net focuses on providing high-performance GPU computing services required for AI and machine learning with unique clustering capabilities. The Render Network also plays a significant role by offering decentralized GPU computing power for next-generation 3D content creation.

It is important to note that the statistics for many competitors include deals or partnerships for bootstrapping nodes rather than operational GPUs today. Almost all projects have utilized this approach thus far. Akash, being a leader in the decentralized cloud marketplace, will likely move to bootstrapping as demand spikes. This differentiation allows Akash to maintain a strong competitive positioning by catering to a wider range of applications, including general-purpose computing, AI, and cloud computing. Akash's commitment to open-source development and its permissionless nature further enhance its appeal to developers and enterprises seeking decentralized solutions. The inclusion of GPUs for AI training and machine learning strengthens Akash's offerings, making it competitive against specialized platforms like io.net.

These competitors provide various decentralized GPU services, each with unique features and target markets. Nevertheless, Akash Network stands out as a first mover, its open-source and permissionless qualities highlighting its decentralized nature, its cost-efficient marketplace model, and focus on AI and high-performance computing.

Decentralized GPU Renting Market Insights

As the AI industry continues to expand, the demand for GPUs has surged, making the GPU market one of the most dynamic and rapidly growing sectors. GPUs are essential for AI workloads due to their parallel processing capabilities, which accelerate operations like neural network training and inference. Their scalability allows for the creation of powerful clusters capable of handling massive datasets and complex AI tasks. GPUs are also more efficient and cost-effective for AI workloads compared to CPUs, making them highly sought after in the AI industry.

Market Pain Points

The rise of AI has accelerated the transition from CPUs to GPUs, contributing to the growing GPU market. However, high-performance GPUs such as Nvidia's H100s and A100s are primarily reserved for large cloud providers and tech giants, leaving AI start-ups, developers, and researchers without access to these critical resources. Additionally, established industry giants like Meta, Tesla, and Microsoft impose hefty fees on end users and lock them into inflexible pricing models. This creates a market need for more accessible and affordable GPU resources.

GPU Renting Market

The traditional GPU rental market provides access to powerful GPUs without the burden of ownership and maintenance. However, it faces limitations in terms of incentives and flexibility. In response, the decentralized GPU rental market is emerging to address these challenges. Decentralized GPU renting projects democratize computational power by pooling GPU resources from various contributors, making them accessible to a broader user base. These projects promote a more equitable distribution of resources with token incentives for both providers and consumers.

Advantages of Decentralized GPU Renting:

- **Cost Efficiency**: Decentralized GPU prices are more affordable compared to traditional providers, making them attractive to AI start-ups.
- **Idle Compute Capacity**: These networks connect entities with idle computing power, efficiently utilizing existing resources.
- **Democratization and Global Access**: Decentralized projects aim to democratize computational power, allowing for more diverse and extensive data training, reducing the risk of bias.
- **Blockchain Integration and Token Incentives**: Utilizing blockchain ensures transparent resource allocation, revenue-sharing, and efficient coordination, while tokens help bootstrap network growth and user adoption.

Obstacles and Challenges:

While the sector is still in its infancy, the decentralized GPU rental market faces challenges such as interoperability, scalability, user onboarding complexity, and security concerns. Addressing these issues is crucial for the long-term success and adoption of decentralized GPU renting projects.

Despite these challenges, decentralized GPU initiatives have the potential to democratize computational power and drive innovation in AI, gaming, and other domains. The market is

still in its early stages but shows immense promise in reshaping the distribution of computational resources.

Team

The leadership team of Akash Network is composed of experienced professionals with backgrounds in cloud architecture, software engineering, and finance.

Key Team Members:

- Greg Osuri (Co-Founder and CEO): Experienced in cloud architecture and entrepreneurship, with key roles at IBM and founder of AngelHack and Overclock Labs.
- Adam Bozanich (Co-Founder and CTO): Software engineering expert with senior positions across various tech domains and co-founder of Sprouts Tech and Overclock Labs.
- Cheng Wang (CFO): Finance professional with experience at Merrill Lynch, Societe Generale, Morgan Stanley, Goldman Sachs, and Royal Bank of Scotland.

Tokenomics and Business Model

Here are Akash Network's initial token distribution, allocated tokens to various stakeholders, the token usage, token unlock schedule, and economic model. The following breakdown provides an overview of the tokenomics:

Initial Token Distribution

- **Token Supply at Genesis**: 100 million AKT.
- **Maximum Token Supply**: 388,539,008 AKT.
- **Inflation Rate**: Initially set at 4.50% monthly, with the rate halving approximately every 3.7 years.

Figure 5: $AKT Initial Distribution

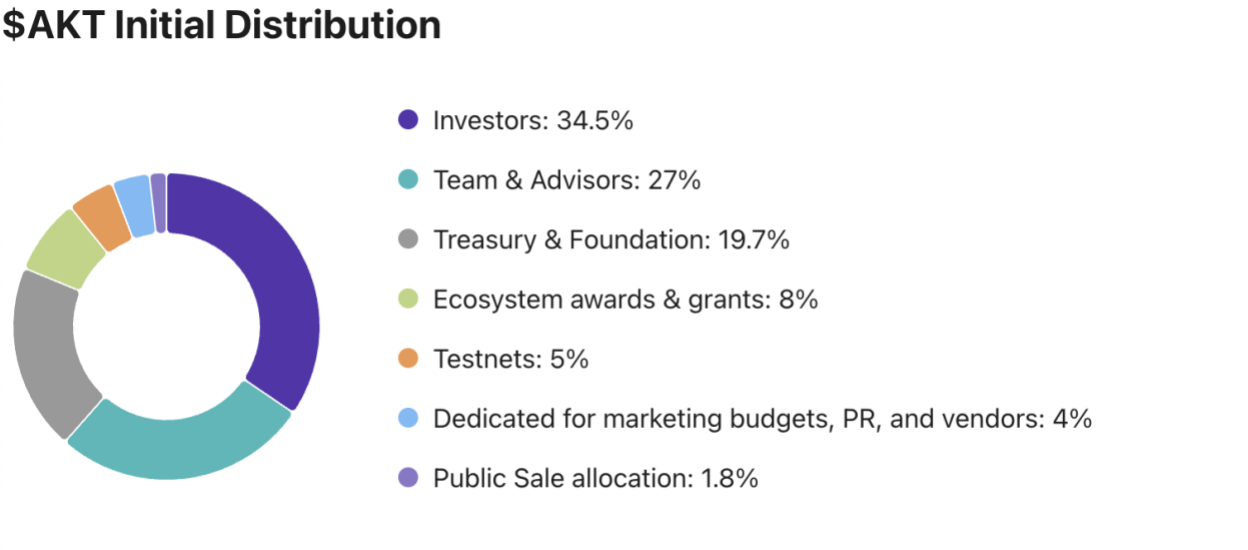
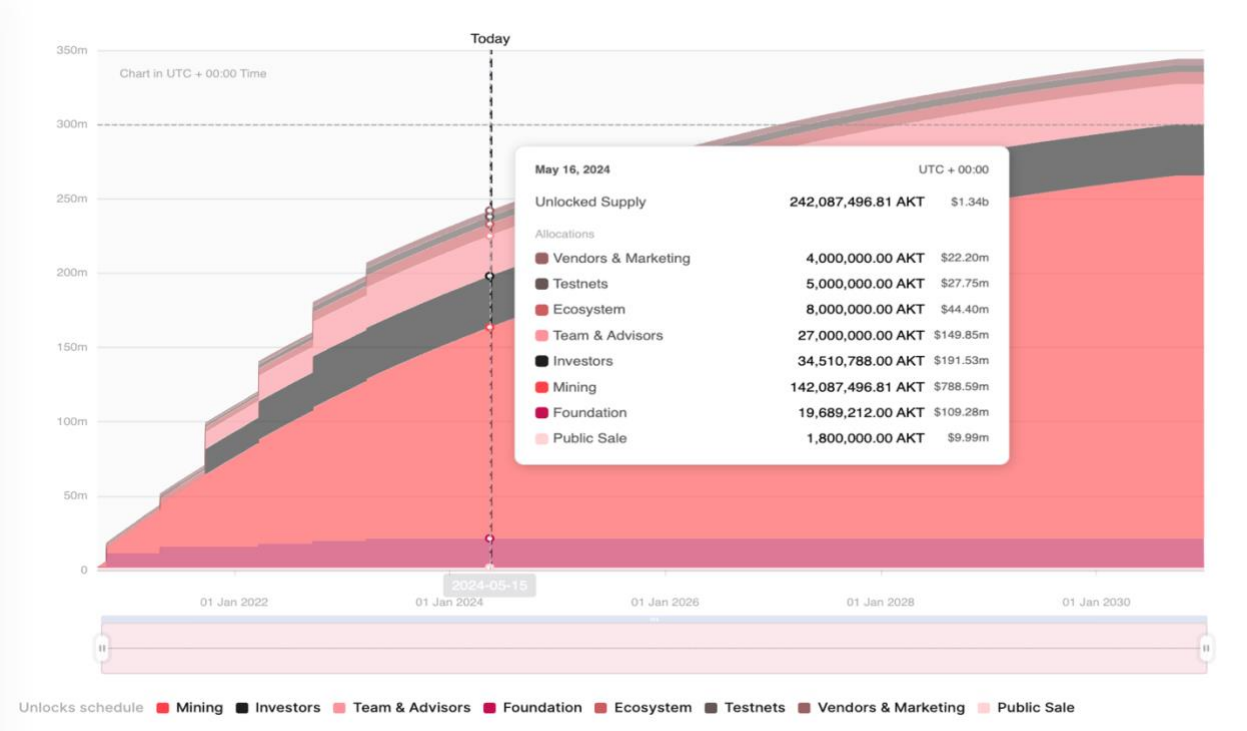


Figure 6: $AKT Token Unlock Schedule



Allocation Details

Allocation	Amount	Description
Public Sale	1.80m	Fully unlocks at TGE event on 25 September 2020
Investors	34.51m	Cliff lock-up for 1 year and then unlocked as two cliffs of 6 month intervals

Allocation	Amount	Description
Team & Advisors	27.00m	Cliff lock-up for 1 year and then unlocked as two cliffs of 6 month intervals
Foundation	19.69m	1,000,000 token unlock at TGE, then a cliff unlock 1 month after TGE, and a 6 month cliff unlock, a 12 month cliff unlock, and then two 6 month cliff unlocks
Ecosystem	8.00m	Cliff unlock 1 month after TGE, a 6 month cliff unlock, a 12 month cliff unlock, and then two 6 month cliff unlocks
Testnets	5.00m	Cliff unlock 1 month after TGE, a 6 month cliff unlock, a 12 month cliff unlock, and then two 6 month cliff unlocks
Vendors & Marketing	4.00m	Cliff unlock 1 month after TGE, a 6 month cliff unlock, a 12 month cliff unlock, and then two 6 month cliff unlocks
Mining	244.13m	Mining is estimated based on halving onto year 2030

Token Usage

- **Network Fees**: AKT is used to settle network transaction fees.
- **Incentives**: AKT is used to incentivize developers and contributors to the network.
- **Staking and Rewards**: Validators stake AKT to secure the network and earn inflationary rewards. Delegators can also stake AKT to existing validators for a share of the rewards.
- **Governance**: AKT token holders participate in network governance, voting on proposals and decisions that impact the platform's development and operations.
- **Leases and Collateral**: AKT is used for lease payments and as collateral for providers bidding on lease orders.

Economic Model

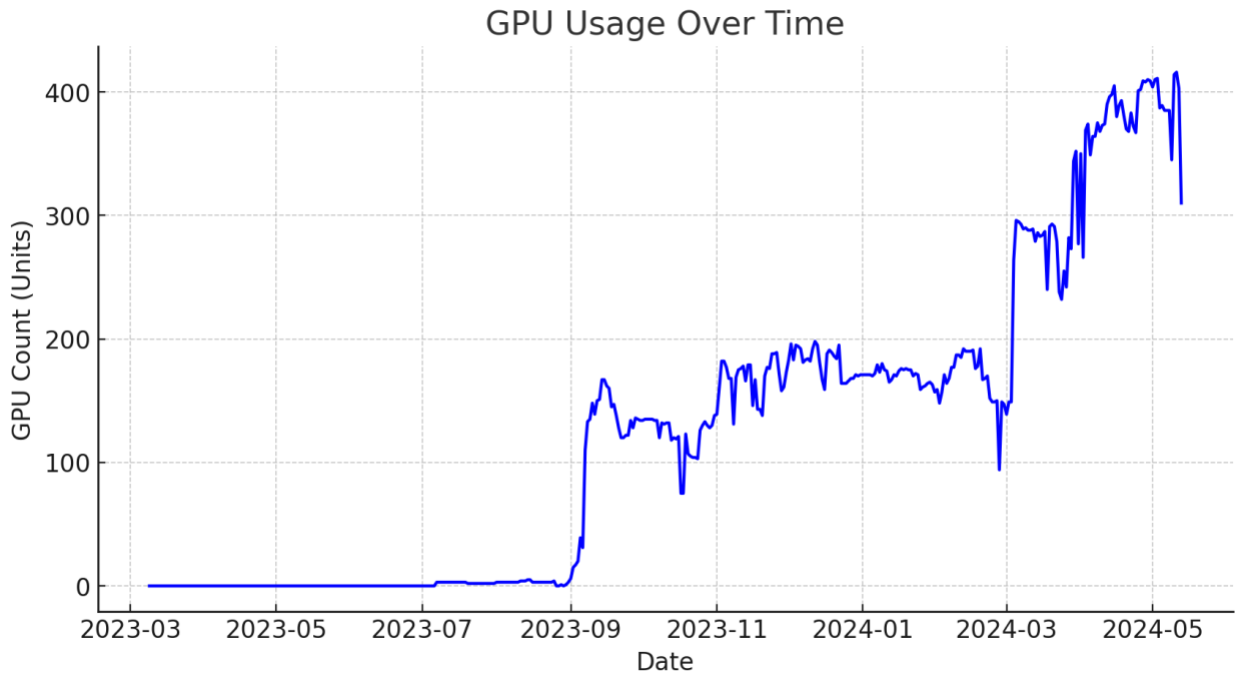
- **Network Security**: Proof-of-Stake mechanism with AKT staking correlates to network security.
- **Public Goods Fund**: The network has established a public goods fund to finance the ongoing development of Akash. This fund operates through an on-chain mechanism, allowing anyone to apply for funding and receive support for contributing to the project.
- **Reverse Auction Mechanism**: Akash employs a reverse auction mechanism where providers bid to offer the lowest price for their resources, ensuring competitive pricing for users.

- **Incentive Distribution Pool (IDP)**: Future plans to introduce a pool funded through fees and inflationary rewards, supporting provider subsidies, a public goods fund, AKT stakers, and a community pool.
- **Token Burning**: Fees not in AKT will be converted and burned to maintain the token's value.

Monitoring Marketplace Performance

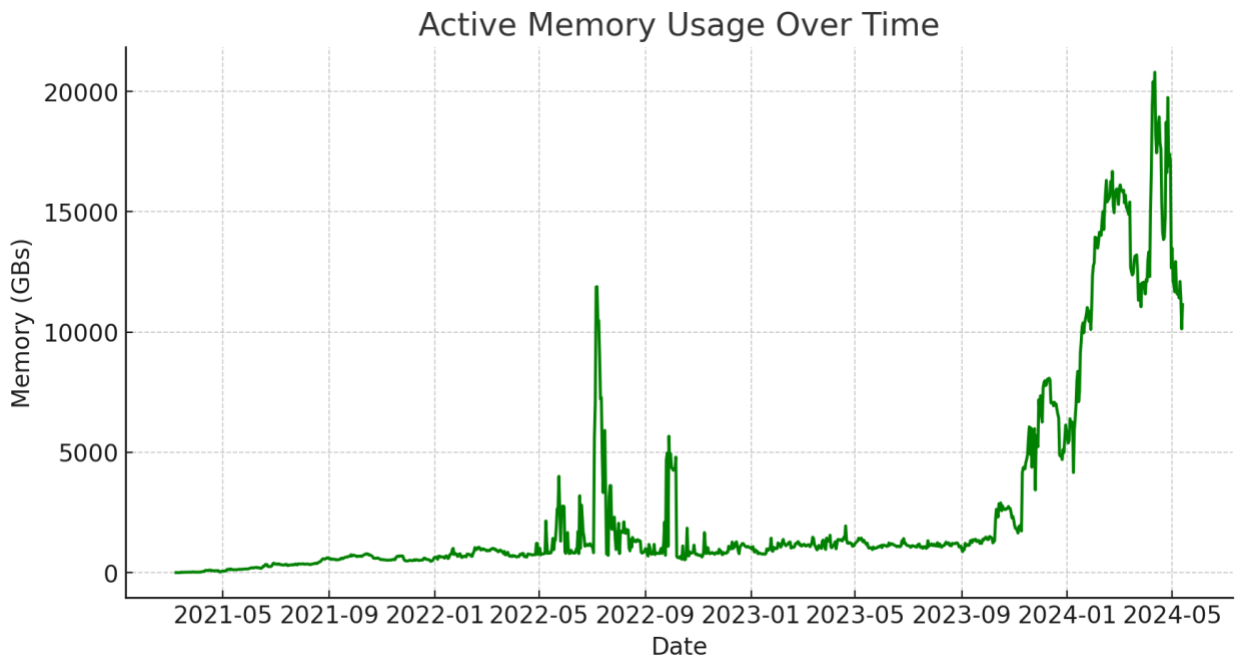
Monitoring marketplace performance is crucial to understand the adoption, utilization, and economic activity on the Akash Network. The following figures provide insights into various performance metrics:

Figure 7: GPU Usage Over Time



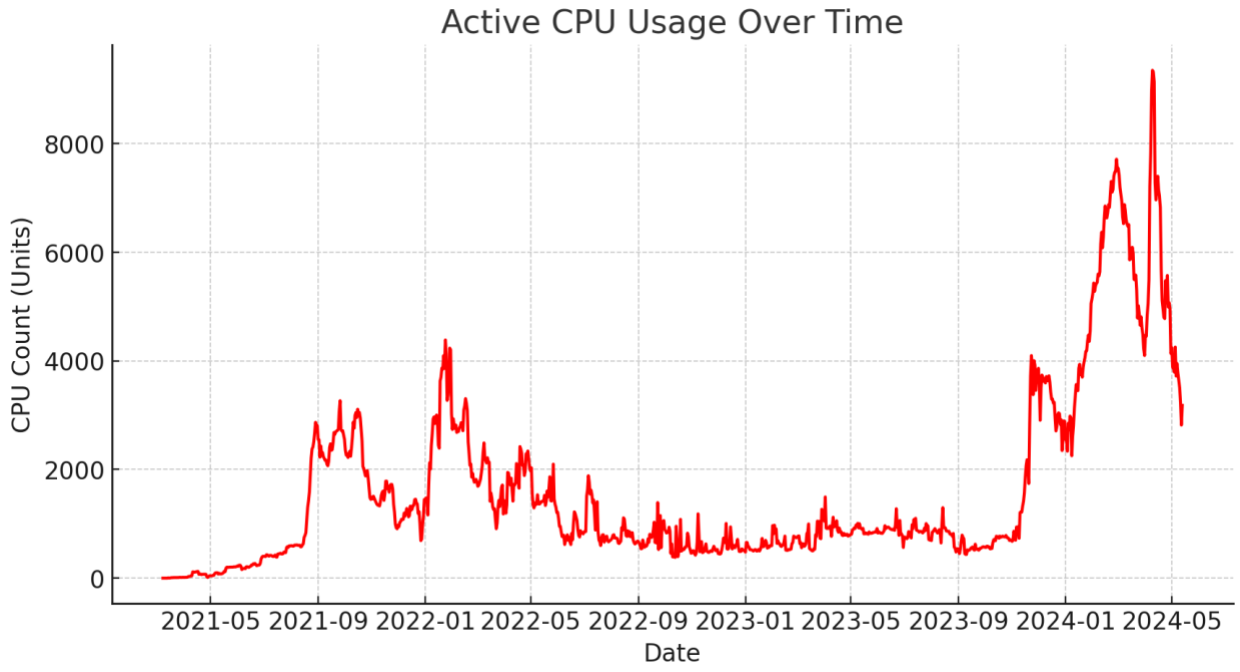
Insight: This chart shows the GPU usage on the Akash Network over a period, indicating the demand for GPU resources. An upward trend in GPU usage reflects growing adoption by AI developers and high-performance computing users.

Figure 8: Active Memory Usage Over Time



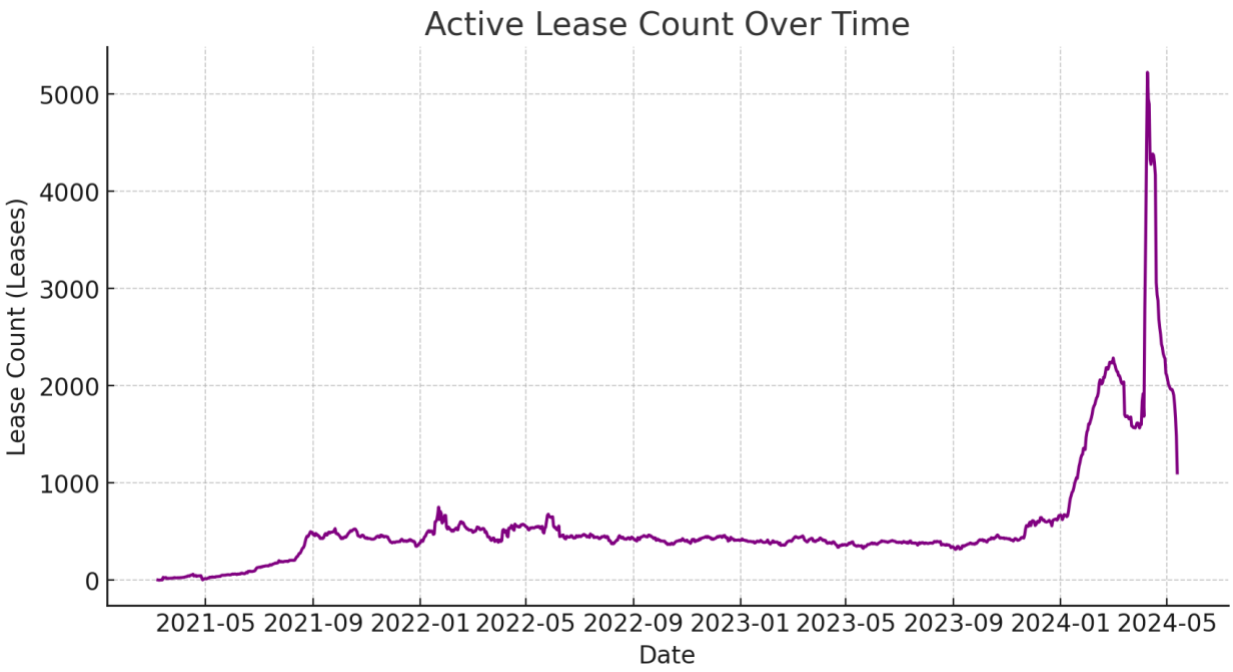
Insight: This graph tracks the active memory usage on the Akash Network, providing insights into the memory requirements of deployed applications. Consistent growth in memory usage suggests an increasing number of complex and memory-intensive applications being deployed on the network.

Figure 9: Active CPU Usage Over Time



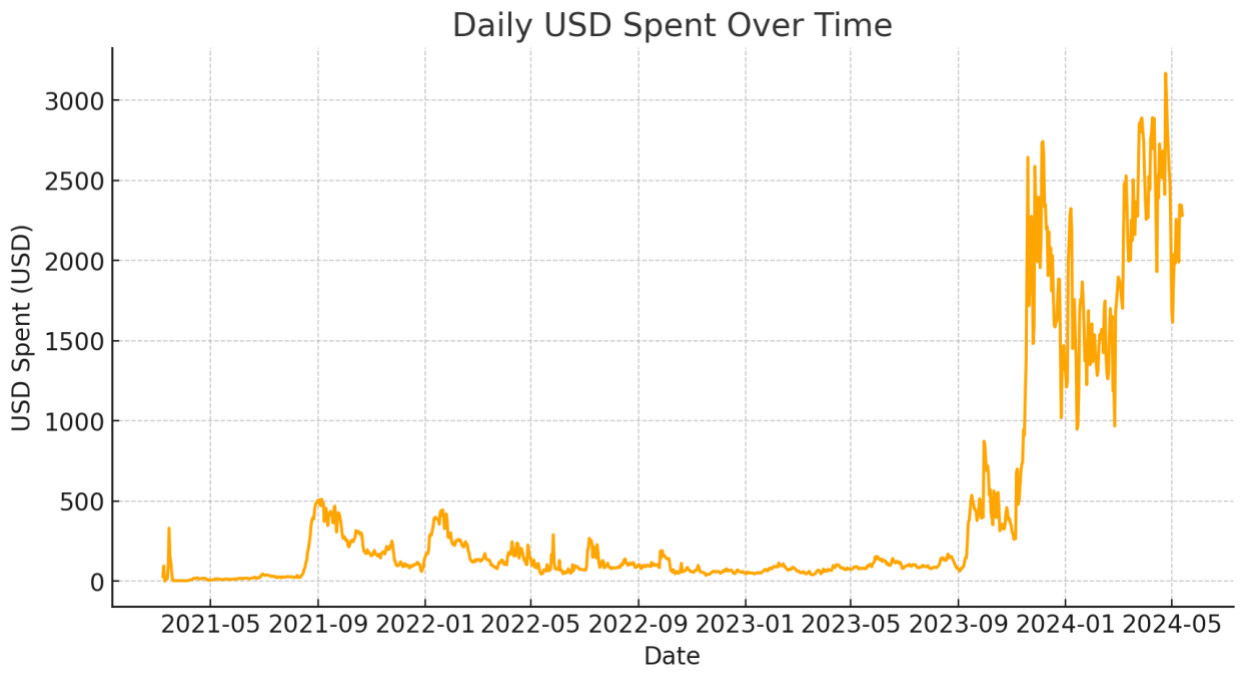
Insight: This figure presents the active CPU usage over time, indicating the processing power demand on the network. A rising trend in CPU usage reflects the growing adoption of Akash Network for computational tasks.

Figure 10: Active Lease Count Over Time



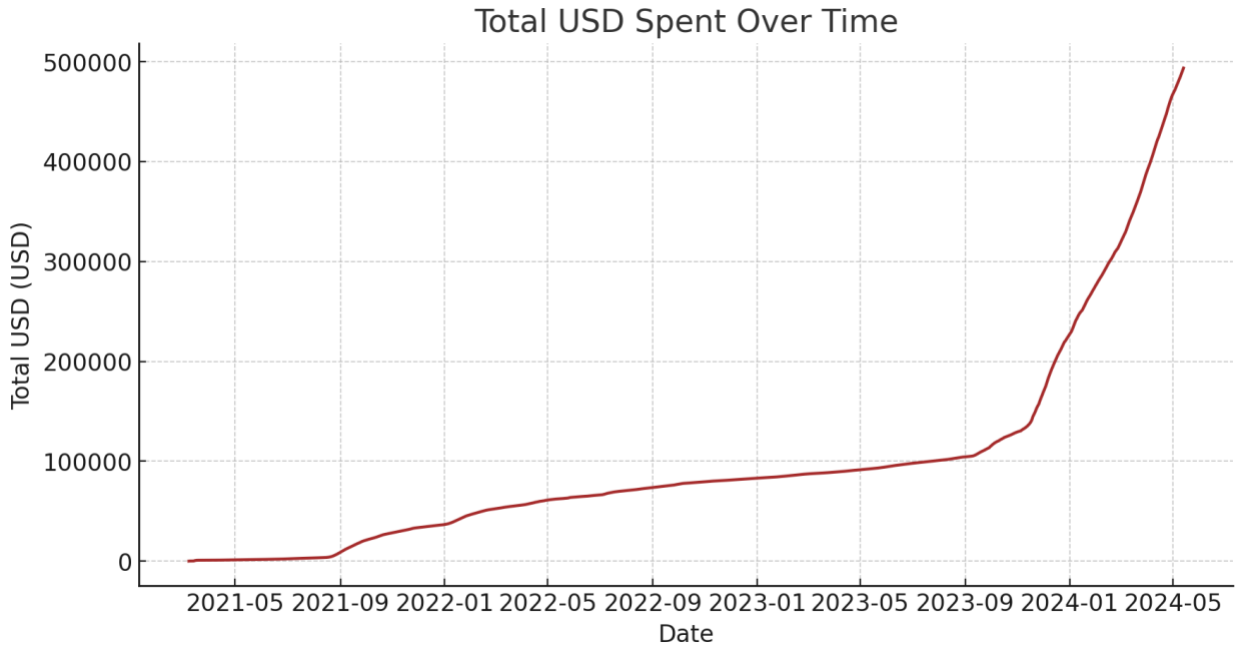
Insight: This chart illustrates the number of active leases on the Akash Network, representing the number of ongoing contracts for computing resources. An increasing lease count signals healthy network activity and user engagement.

Figure 11: Daily USD Spent on Akash Network Over Time



Insight: This figure tracks the daily expenditure in USD on the Akash Network, showing the economic activity and financial commitment of users. Higher daily spending indicates increased usage and value derived from the network.

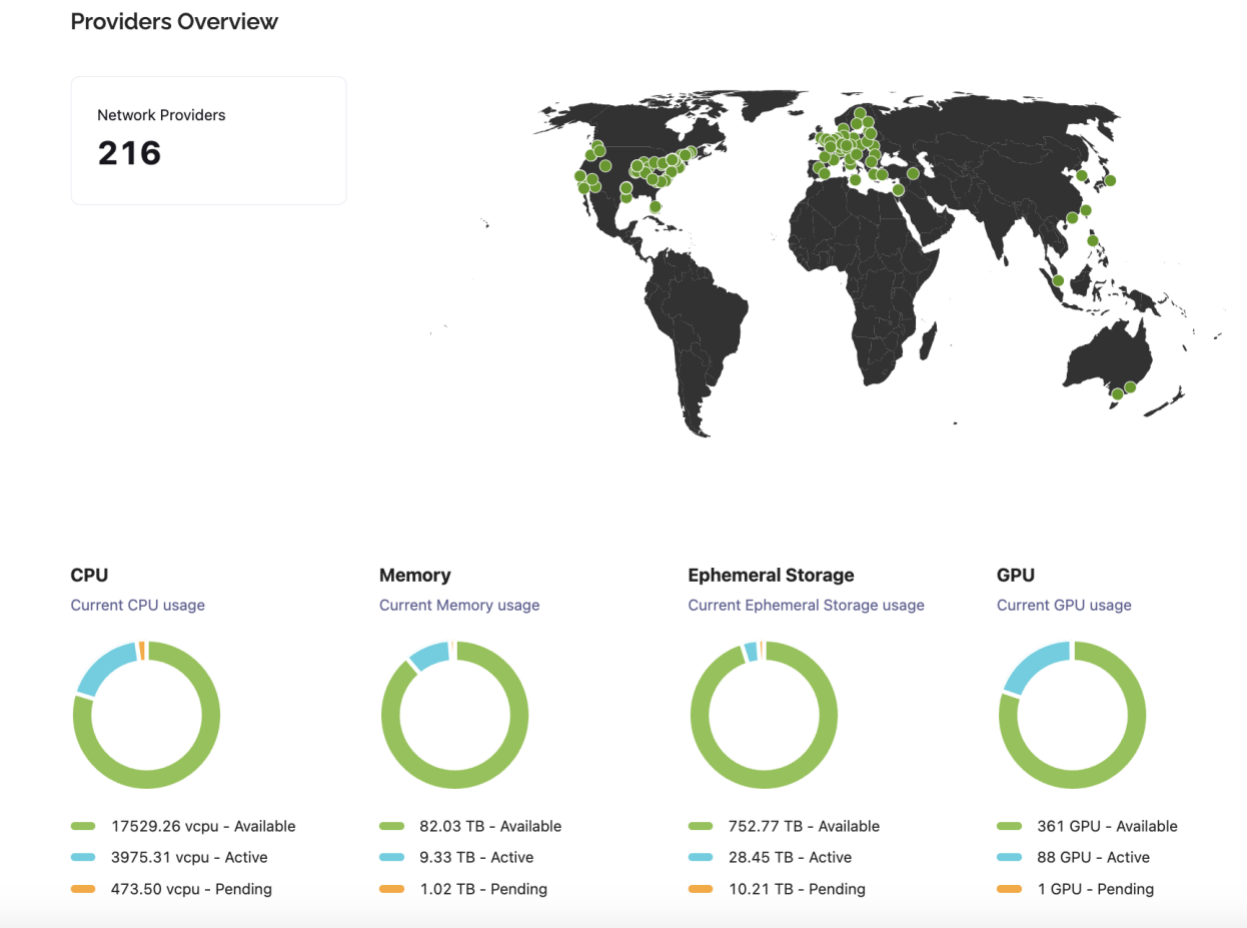
Figure 12: Total USD Spent on Akash Network Over Time



Insight: This cumulative chart shows the total USD spent on the Akash Network over time,

reflecting the overall economic contribution to the network. Steady growth in total spending signifies sustained user investment and trust in the platform.

Figure 13: Akash Metrics and Active Providers on Mainnet Map



Insight: Akash comprises 216 network providers primarily located in the EU and USA, showcasing its expanding decentralized nature. This figure also illustrates the ratio of active units to total units available on the Akash Network, highlighting the utilization rate of the network's resources. Akash has shown prominence, continuing to build up their supply. The next step for Akash Network will be to continue to build up demand for their leasing marketplace.

Recommendation

Akash Network represents a significant leap in the evolution of cloud computing, offering a decentralized, cost-effective, and technologically advanced alternative to traditional models. Its leadership, strong community backing, and continuous technological

advancements position it well for future growth. The main challenges for Akash Network are to maintain its competitive advantage within the broader Web3 GPU leasing for computing market, regulatory uncertainties, and to navigate the complexities associated with cryptocurrency transactions carefully.

Recommendation:
Based on the comprehensive analysis of Akash Network's demand, product and technology, competitors, team, tokenomics, and market performance, the following recommendations are made:

- **List $AKT on Binance**: Network's innovative approach to decentralized cloud computing, active development community, and robust market performance make it a strong candidate for listing.
- **Invest in Akash Network**: The project's continuous development, growing adoption, and significant market potential present a compelling investment opportunity.
- **Partner with Akash Network**: Collaborating with Akash Network could enhance Binance's service offerings, especially in the decentralized cloud computing space, and foster mutual growth.

Appendix

- Figure 13: Akash Metrics and Active Providers on Mainnet Map

---

References

- Akash Network Official Website
- Akash Network Tokenomics
- Cosmos SDK
- Crypto.com Research on Decentralized Compute
- A16z Report on Cloud Costs
- Dune Analytics Akash Metrics
- Mintscan Akash Network Statistics
- Overclock Labs Acquisition
- Mainnet 6 Launch
- Akash ML Launch
- Akash Allocation details
- AKT 2.0 Tokenomics
- Osuri's Lightbulb Moment
- Mintscan Akash Validators
- Akash Network GitHub
- Stack Money Akash Network
- Cypher Capital
- Digital Asset Capital Management
- Zokyo
- Genblock Capital
- Precedence Research
- Token Insight

- Aethir and io.net partnership
- Precedence Research GPU Market Report
- Render Network Overview
- Flux GPU Data
- Gaimin GPU Data
- Gaimin Overview
- Aethir Research Report
