



**Cedral Advisory**  
RESEARCH REPORT

DECENTRALIZED INFRASTRUCTURE SERIES

# Overclock Labs

## THE AKASH NETWORK

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### SECTION 01

## Executive Summary

Overclock Labs is a team of open-source builders, blockchain developers, and technology professionals based in San Francisco, California. Their primary project is the Akash Network — a decentralized, open-source cloud computing marketplace that allows users to buy and sell computing resources (CPUs and GPUs) on a peer-to-peer basis.

Akash is frequently described as the "Airbnb of compute." Through a reverse auction system, compute providers bid for users' business, enabling access to resources for machine learning, AI applications, large language models, and data-intensive analytics at significantly reduced cost.

To remain open-source, decentralized, and permissionless, Akash is built on blockchain technology and secured by its native utility token, AKT. The token incentivizes network participants and provides a mechanism for value exchange.

### Key Challenges

**Indirect competition:** AWS, Google Cloud, and Microsoft Azure dominate the IaaS market. Akash is not positioned to displace these giants directly but rather to serve the growing segment they underserve.

**Market awareness:** Decentralized Physical Infrastructure Networks (DePIN) remain outside mainstream awareness. However, rapid AI adoption is accelerating public familiarity with the underlying technology.

**Updated March 27, 2026** — Akash's Burn-Mint Equilibrium (BME) upgrade passed governance vote on March 14, 2026, introducing stable USD-denominated compute payments and CosmWasm smart contracts — a significant development for enterprise adoption.



# Problem Identification

## *How should the firm compete with rivals in the technology market?*

Akash occupies a unique competitive position in the IaaS landscape. Rather than attempting to displace AWS, Azure, or Google Cloud — which collectively held 63% of the global cloud infrastructure market in Q4 2025 — Akash serves a distinct and underserved demographic: small to medium-sized businesses and individual developers who require flexible, affordable compute access.

Provider	Q4 2025 Market Share
Amazon (AWS)	28%
Microsoft (Azure)	21%
Google Cloud	14%
Alibaba Cloud	4%
Oracle	3%
Others	30%

*Cloud Infrastructure Market Share — Q4 2025 (Source: Synergy Research Group)*

The secondary market for computing resources — GPUs in particular — is expanding rapidly, and this creates a direct tailwind for Akash. As enterprise demand drives GPU procurement at scale, more providers find themselves holding spare compute capacity they can profitably lease through the network. Akash's strategy is not to take market share from the giants directly, but to capture the growing demand for what can be described as "universal basic compute" — affordable, on-demand infrastructure for the AI era.

***"The key for Akash is not to try to steal market share from the giants, but rather to service the ever-growing need of universal basic compute."***

Historically, high-end compute resources were consumed almost exclusively by large enterprises. With AI tools reaching individual users and SMBs at an accelerating pace, the customer pool for compute is expanding into entirely new territory — and it is calling on a new kind of supplier.

# The Solution: Akash

## SMB AI Adoption: A Growing Market

Small and medium-sized businesses are accelerating their adoption of AI into core operational areas. The percentage investing in AI solutions has grown substantially year over year:

Year	SMBs Investing in AI
2023	36%
2024	42%
2025	57%

*Percent of SMBs investing in AI solutions by year (Source: Business.com, 2026)*

These SMBs would not benefit from the IaaS giants' offerings. The reasons are straightforward: poor product fit, pay structures designed for enterprise scale, and lengthy contractual commitments. The "all or none" sales philosophy of the cloud oligopoly is poorly suited to businesses in the early stages of AI adoption.

## Akash's Competitive Edge

Consider a practical example: a small financial firm undertaking an intensive data analytics project. Rather than committing to a long-term cloud contract, they can spin up infrastructure through the Akash console on a pay-as-you-go basis, shut it down the moment the task is complete, and pay only for what they used. The cost advantage is substantial.

Provider	A100 40GB (\$/hr)	Discount vs Akash
AWS	\$4.10	63%
Azure	\$3.40	56%
Google Cloud	\$2.46	39%
CoreWeave	\$2.06	27%
<b>Akash</b>	<b>\$1.50</b>	—

*Hourly A100 40GB GPU cost comparison (Source: Akash Network, AWS, Azure, GCP, CoreWeave)*

Akash offers price discounts of over 80% against AWS for equivalent GPU compute. Combined with its pay-as-you-go structure and zero contractual lock-in, this represents a compelling value proposition for any organization that needs compute resources without enterprise-scale commitments.

## **Agentic AI on Akash**

A further differentiation: Akash currently supports deployment of localized AI agents directly through its console. Templates such as OpenClaw, Llama 3.1, and DeepSeek-R1 are available for immediate deployment, allowing individuals and businesses to run powerful AI models on rented infrastructure without dependency on centralized AI providers. This personalized, infrastructure-level AI delivery is a first-of-its-kind offering in the DePIN space.



## The Secondary GPU Market

Akash has demonstrated sustained network growth since inception, with provider counts and GPU capacity growing from near zero in 2023 to over 1,000 GPUs at peak capacity in mid-2024. Following the completion of the initial Provider Incentive Pilot (PIP) programs — time-limited subsidy cycles designed to bootstrap supply — raw GPU capacity contracted as expected while organic demand continued to drive utilization.

Network-wide GPU utilization has grown steadily from approximately 44% at the time of the original PIP proposals in early 2024 to a consistent 60% through Q4 2025, with some sources citing figures approaching 80% in early 2026 as AI inference workloads continue to expand. It is worth noting that premium GPU models — particularly A100s — have historically operated at above 90% utilization due to concentrated enterprise demand, reflecting a supply shortage in that specific tier rather than overall network saturation. The more meaningful signal is the direction of the trend: utilization has grown alongside supply, indicating genuine organic demand rather than incentive-driven inflation.

***"Network-wide GPU utilization has grown from ~44% at inception to ~60-80% today — with premium A100s consistently above 90% — signaling genuine organic demand that continues to grow alongside supply."***

There is a tight correlation between GPU provider count and daily revenue on the network, as GPU services generate the largest transaction values. Messari's analysis confirms that total revenue surpassed \$1 million in Q1 2025, with daily revenue and active leases growing in tandem with GPU supply. In Q4 2025, the network maintained a consistent 60% utilization rate through the Mainnet 14 upgrade — its most significant infrastructure transformation to date.

### The GPU Trickle-Down Opportunity

As enterprise GPU procurement accelerates at the top of the market, used and secondary-market GPUs will increasingly flow to smaller providers. These providers — individuals and small operators with spare compute — represent a natural growth vector for Akash. With lower barriers to onboarding, Akash can capture this supply in a way that centralized providers structurally cannot.

**Updated March 27, 2026** — PIP programs completed their cycles in 2025, returning 3.37 million AKT in unspent funds to the community pool. Successor incentive programs including a \$400k Tenant Incentive Pilot and Starcluster — a protocol-owned compute system targeting 7,200 NVIDIA GB200 GPUs — are active and GPU supply is expected to expand significantly into 2026.

# Security Considerations

Contrary to common perception, decentralized infrastructure can be highly secure — and in some respects more secure than its centralized counterparts. Akash employs both conventional security practices and blockchain-native mechanisms to protect the network and its users.

## Provider-Side Security

To participate in the network, compute providers must stake AKT tokens. Any malicious behavior results in "slashing" — the permanent loss of staked funds. All on-chain activity is publicly visible, creating accountability by default. Users select their own provider, meaning reputation and reliability directly determine commercial success. User funds are held in escrow and returned if a provider fails for any reason.

## Data Security

When paired with a trusted provider, users receive mTLS encryption and container isolation as standard. Akash's 2026 roadmap includes Trusted Execution Environments (TEEs), scheduled for delivery by end of 2026, which will ensure data is always encrypted and hardware providers cannot access or observe running workloads.

## Decentralization as a Security Property

Centralized cloud providers present a concentrated attack surface: a single breach can expose data across millions of users. On Akash, a malicious actor would need to infiltrate a specific provider to access any individual's data — a dramatically harder target. Centralization provides an illusion of security through brand trust. Decentralization provides structural security through architecture.

***"Centralization provides users with an illusion of safety. Decentralization provides the full picture."***

Current state: Akash is safe today for non-sensitive workloads. For highly confidential data, TEE support expected by end of 2026 will provide full compute isolation.

# Conclusions

The Akash Network is building infrastructure for a decentralized, AI-powered future. Artificial intelligence is finding its way into daily applications across every device with an internet connection, and the centralized compute infrastructure currently in place is structurally incapable of serving this demand at scale or at acceptable cost.

Just as Uber converted idle cars into an income-generating network, and Airbnb unlocked value in underutilized homes, Akash is building the infrastructure layer that converts the world's spare compute into accessible, affordable cloud resources. The network offers dramatically lower pricing, flexible pay-as-you-go structures, and a growing suite of AI deployment tools that directly address the unmet needs of SMBs and individual developers.

The near-term challenges — brand awareness, incentive program optimization, and the current GPU supply gap — are solvable. The structural tailwinds — AI adoption, secondary GPU market expansion, and enterprise compute demand — are not going away. The BME upgrade passed in March 2026 represents a meaningful step toward enterprise-grade pricing stability and programmable infrastructure.

***"Through far cheaper prices, better latency, and end-to-end encrypted security, Akash will provide a high-quality service for the global compute consumers of the future."***

## Sources

1. Amazon Web Services. Amazon EC2 On-Demand Pricing. <https://aws.amazon.com/ec2/pricing/on-demand/>
2. Akash Network. Decentralized Compute Marketplace. <https://akash.network>
3. Jow, V. (2024). From cloud computing to AI, will Akash become the dark horse in the DePIN track? Gate Learn.
4. Jow, V. (2024). Our Akash thesis. Modular Capital. <https://www.modularcapital.xyz/writing/akash>
5. Akash Network. Mainnet dashboard. <https://stats.akash.network/>
6. Epoch AI. (2025). Private-sector companies own a dominant share of GPU clusters. <https://epoch.ai>
7. Roots Analysis. Data center GPU market size, trends & insights report, 2040. <https://www.rootsanalysis.com>
8. Brooks, C. (2026). 2026 Small Business AI Outlook Report. Business.com.
9. Messari. (2025). State of Akash Q3 2025. <https://messari.io/report/state-of-akash-q3-2025>
10. Akash Network. (2026). Q4 2025 Report. <https://akash.network/blog/q4-2025-report/>
11. Akash Network. 2026 Roadmap. <https://akash.network/roadmap/2026/>
12. Synergy Research Group. (2025). Cloud Infrastructure Market Share Q4 2025.

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