Enya Labs

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Enya Labs is a software company specialized in distributed systems engineering, privacy-preserving computation, and application development. Enya is a core contributor to the development of Boba Network

Enya Labs

What we do: Enya Labs excels in distributed systems engineering, application development and privacy-preserving technologies, building the next-generation applications that serve the creator economy.

Why we do it: Our mission is to enable the widespread adoption of blockchain technologies to create a more transparent and connected world.

How we do it : Extending the Blockchain Infrastructure to the rest of the world by contributing to Boba Network.

Who we are: We are a team of experts with the know-how and knowledge on both Web 2.0 and Web 3.0 technologies with a mission to support the next generation of internet.

Boba Network at a Glance

Overview

- Boba Network (“Boba”) is the multichain, Hybrid Compute platform built on an optimistic rollup layer-2 architecture
  - Utilizing its Hybrid Compute technology, Boba makes blockchains **smarter**
  - As an optimistic rollup, Boba makes transactions **faster** and **cheaper**
  - Boba is the first and only Layer-2 to **scale multiple Layer-1 blockchains**

The Only Multichain Layer-2 – Scaling:

Ethereum

BNB Smart Chain

Avalanche

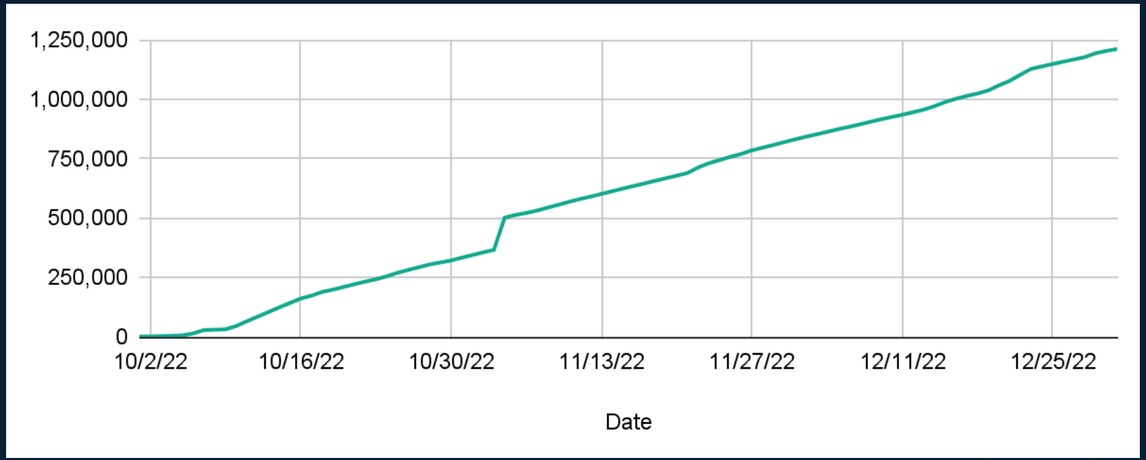
Moonbeam

Fantom

Key Characteristics

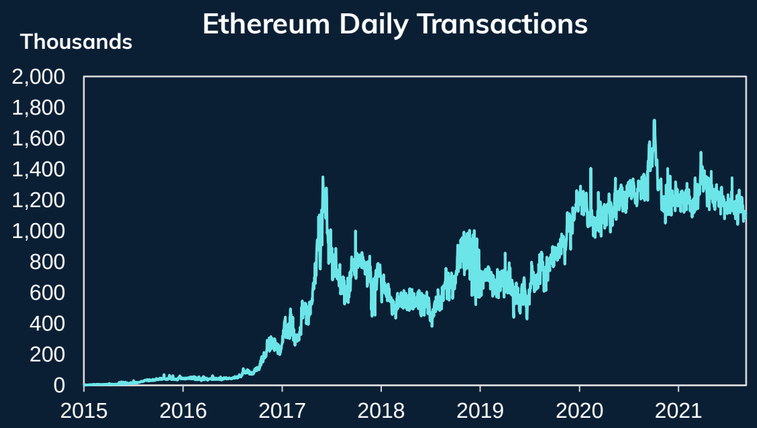
- Bridges web services and real-world data to blockchains
- Uses native token ($BOBA) to pay gas fees
- Network governance directed by native DAO
- Serves as an execution layer for underlying Layer-1s

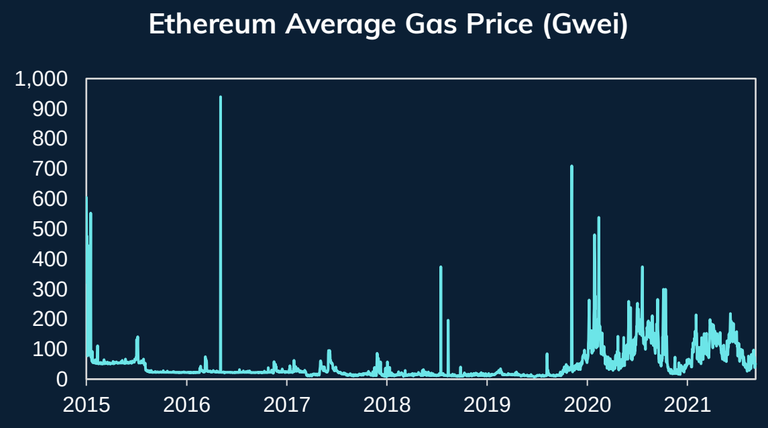
Cumulative Transaction Volume (Q4’22)

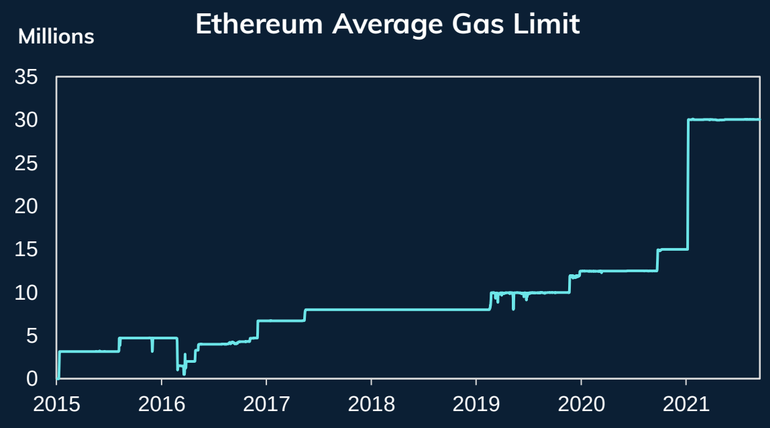


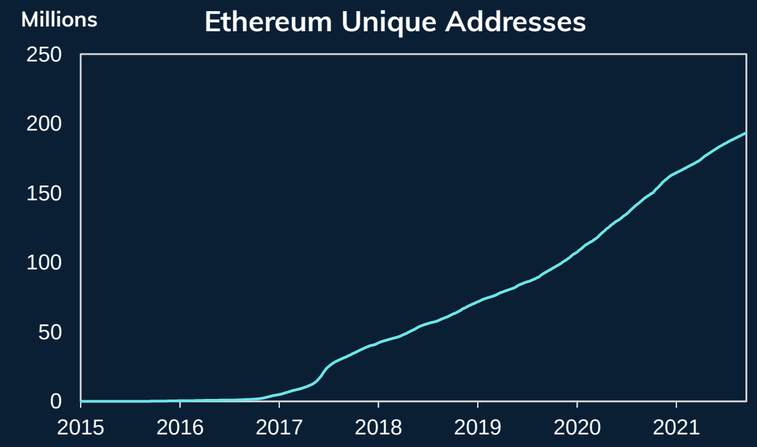
Growing Demand for Layer 1 Block Space

- Given the increasing adoption of decentralized smart contract networks in 2021, on-chain block space has become a scarce commodity. Ethereum, the Layer 1 network of choice for many, has seen the surge in adoption first-hand, as illustrated by the metrics below.









Source: Etherscan.io

- From Q3 ‘15 to Q2 ‘22, Ethereum daily transactions has experienced a CAGR of 157%, increasing by 542x over almost 7 years
- Ethereum unique addresses have grown by a CAGR of 442% over the same period, seeing a total of 193m unique wallets as of Q2 ’22
- Evidently, this increase in activity is also reflected in Ethereum’s average gas limits and average gas price. As DeFi protocols build more complex products, average gas limit per transaction has increased. The demand for these complex products has proliferated as well, as users are willing to pay more per unit of gas in the form gas prices

With Distinctive Advantages over Other L2 Networks

- Launched in Nov' 21, Boba Network is the first Layer 2 network that strives to be the execution chain across all Layer 1s.
- Additionally, Boba Network has several characteristics that differentiates itself from alternative Layer 2 networks.

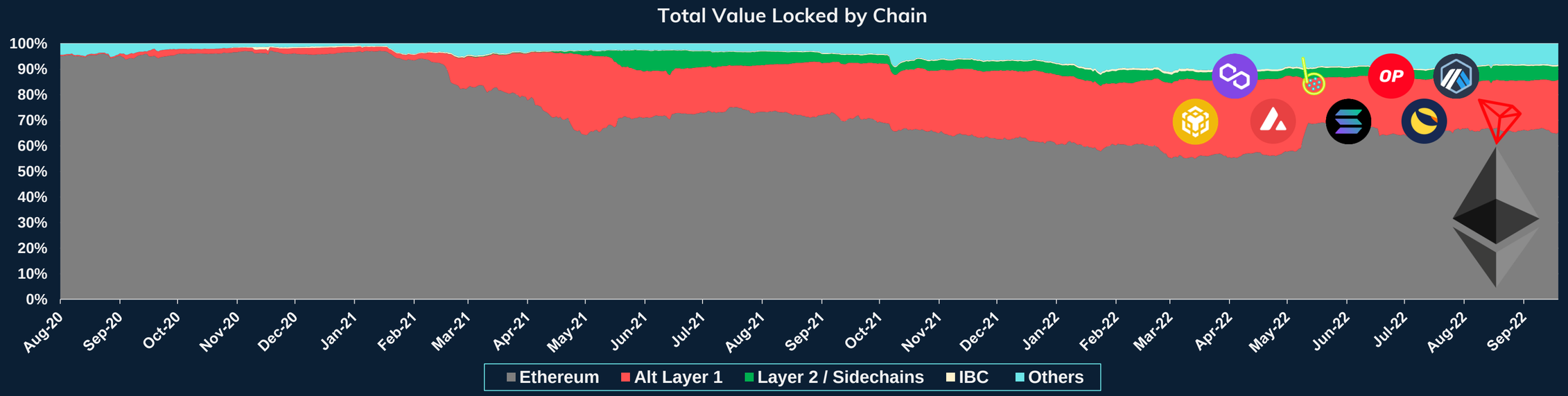
Network Characteristics	BOBA Network	Other L2 Networks
Bridges real-world data to blockchain networks	✓	✗
Uses native token to pay gas fees	✓	–
Network governance directed by native DAO	✓	–
Serves as an execution layer for underlying Layer 1 networks	✓	✓

✓ Fulfills ✗ Does Not Fulfill – Case dependent

Source: Fundstrat, Boba

Has Resulted in Blockchain Activity Going Multichain

- While Ethereum is still widely regarded as the dominant Layer 1, an overwhelming demand for block space has seen on-chain activity flowing to alternate Layer-1s and EVM-compatible Layer 2 / sidechains since early 2021.
- With blockchains consciously choosing between design tradeoffs to cater to different use cases, a multichain future is almost a foregone conclusion. This phenomenon is supported by TVL distribution per categories below.



The unbundling of blockchain layers and growing relevance of multichain networks presents an opportunity for an execution layer to serve as the scaling solution to Ethereum and alternate Layer-1s

Source: Fundstrat, Boba

Boba Strives to Be the First Multichain Layer 2

- Recognizing the importance of cross-chain interoperability, Boba has announced integrations with BNB Smart Chain, Avalanche, and Moonbeam. Each Layer 1 integration will introduce new DeFi / NFT primitives to the Boba ecosystem, and a new community of Boba users to these multichain dApps.

Scaling Ethereum and Beyond

BNB Smart Chain | Avalanche | Moonbeam | Ethereum

Live

- Boba Networks launched its optimistic scaling solution for Ethereum as a proof-of-concept. As Hybrid Compute grows to support larger data sets and data types, the team is concurrently focused on deploying across other Layer 1 Networks.
- BNB Smart Chain is an EVM-compatible blockchain with smart contract functionality, running in parallel to the BNB Beacon Chain. It is the second largest blockchain by TVL, benefitting from its CEX affiliation and on-ramp.
- Avalanche is an alternate Layer 1 network that popularized the notion of scalability via application-specific subnets. At launch, it boasted $180m in Avalanche Rush DeFi incentives, attracting almost $24b in TVL at its peak.
- Moonbeam is an EVM-compatible Polkadot relay chain built using the Substrate blockchain framework. Similar to Polkadot, Moonbeam has a sister network Moonriver that is live on Kusama. The chain hosts $147m in TVL across 20 dApps.

Enabling dApp Multi-chain Interoperability

- Deployed live on Ethereum and with Avalanche, BSC, and Moonbeam integrations to come, Boba hopes to help dApps benefit from deployment homogeneity while launching across Layer 1s scaled by Boba.

While creating stronger demand for BOBA

- Tokenomics proposal voted on soon to incorporate vote-escrowed mechanisms to the BOBA token, drawing inspiration from Curve Finance.
- With Boba Network scaling other Layer-1 networks and bridging dApps to build across them, Boba stands to capture value from multiple vectors and different stakeholders across their value chain.

Source: Fundstrat, Defillama

Hybrid Compute Bridges Web 2.0 to Web 3.0

Advantages

- Prioritizes speed
- Good UI / UX
- Easy implementation
- Scalable infrastructure
- Inexpensive maintenance

Limitations

- Centralized points of failure
- Not censorship-resistant
- Proprietary software
- Permissioned access
- Value accrues to shareholders

Advantages

- Decentralized
- Censorship resistant
- Open-source software
- Permissionless access
- Value accrues to users (i.e. token holders)

Limitations

- Prioritizes decentralization
- Subpar UI / UX
- Complex implementation
- High cost to users
- Significant setup costs

- Web 2.0-focused companies benefit from speed, polished user interfaces and experiences, and are easy implement.
- Web 3.0 protocols prioritize decentalization at the expense of subpar user experiences and higher user costs.
  - While incumbent Layer 2 scaling networks offer faster transactions than Ethereum, few are doing so across other Layer 1 networks or onboarding real-world companies or applications to Web 3.0.

Boba leverages the computational power of Web 2.0 and the decentralization of Web 3 through Boba's hybrid compute model

Source: Fundstrat, Boba

boba

Hybrid Compute - Example Use Cases

Boba's Hybrid Compute allows smart contract developers to call upon any off-chain API in a single transaction – outsourcing computationally-intensive actions that enhances blockchain use cases

GAMING

Enables game developers to utilize off-chain APIs to access game data and perform calculations related to in-game assets and player progress

FINANCIAL SERVICES

Financial services based on aggregating on-chain and off-chain data at a granular level and leveraging off-chain AI models

DIGITAL IDENTITY VERIFICATION

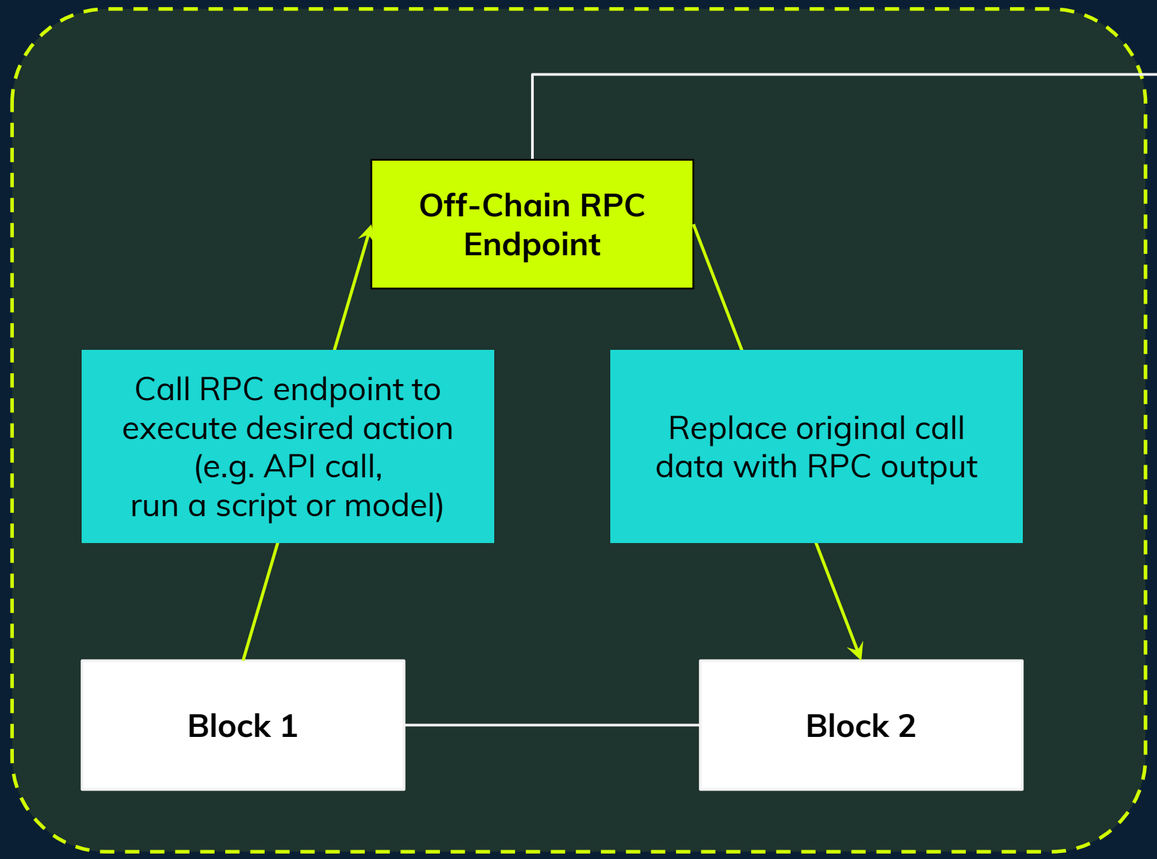
Identity verification systems enabled by off-chain KYC solutions

SUPPLY CHAIN MANAGEMENT

Track the movement of goods through the supply chain calling off-chain API to retrieve real-time data on the location, status and authenticity of the products

Integrating Web2 Infrastructure into Web3

- Integrating RPC endpoint accessibility into the Boba network creates a pathway to smooth the transition from crypto being a cypherpunk technology to an immutable network that empowers crypto-native and real-world applications.



Open-Ended RPC Endpoint Use Cases

Execute prediction models on AWS Cluster and roll outputs into sustainable strategies	Host blockchain-based game on local server for graphically-intensive online simulation processing with low latency
Build comprehensive automated trade strategies for both digital assets and traditional markets via on and off-chain APIs	Unlock and track off-chain commercial data (e.g. pricing, volume) on chain to promote transparency
Empower content creators to engage with fanbase and stimulate activity on social media platforms	Integrate in-person and remote luxury goods auctions that cater to investor preferences without compromising security

Source: Fundstrat, Boba

What is next:

- We are focused on building an enterprise application layers
- Enabling the interoperability of Web 2.0 and Web 3.0
- Empowering enterprise and institutional players to leverage their existing data assets and customer base as competitive advantages in Web 3.0
- Enabling CeFi players to compete for and expand on-chain market opportunities
- Enabling DeFi protocols to enter the institutional market by leveraging existing and trusted enterprise AML/KYC services

Q & A