The Full Story Behind ZetaChain Raising $27 Million For Interoperable Layer-1 Blockchain

The crypto world is no longer centered solely on Bitcoin. There are numerous new blockchains that are significantly different from one another. This causes some inconvenience.

It is impossible to simply send cryptocurrency from one network to another due to their incompatibility, and doing so means you will lose your tokens forever. Cross-chain bridges are commonly used for such operations, though they have some serious flaws which ZetaChain has come to solve.

What then is ZetaChain?

ZetaChain is a decentralized blockchain built on Tendermint Consensus and Cosmos SDK, allowing for interoperability with other blockchains and L2 networks. It is based on the proof-of-Stake algorithm and allows for completely transparent transactions that can be verified in a trust-minimized manner.

ZetaChain is the foundational, public blockchain that enables omnichain, generic smart contracts, and messaging between any blockchain.

ZetaChain envisions and supports a truly fluid, multi-chain crypto ecosystem. These “omnichain” smart contracts can send data and value between connected blockchains, including Ethereum, Polygon, Binance Smart Chain, and eventually, non-smart chains such as Bitcoin and Dogecoin.

Additionally, ZetaChain offers a platform for smart contracts that supports omnichain interoperability. This technology enables automated transactions even on blockchains that do not currently support them, such as Bitcoin or Dogecoin.

Developers do not need to learn a special programming language to create decentralized applications on ZetaChain because the blockchain is EVM-compatible. This means that you can use apps for Ethereum and are compatible with all other networks.

Here are a few examples of what can be created in the ZetaChain ecosystem:

- Decentralized fault-tolerant bridges;
- Dex platforms that work with multiple blockchains without the use of wrapped tokens;

- Omnichain smart contracts that can monitor and perform transactions on all connected chains;

- Cross-chain lending protocols.

How ZetaChain Works

ZetaChain operates on a vast network of validators. These Validators reach a consensus on external events, making necessary updates. Central to each validator are the ZetaCore and ZetaClient.

While ZetaCore keeps the blockchain running smoothly, ZetaClient vigilantly observes external chain events and approves outgoing transactions. The bundled powers of ZetaCore and ZetaClient are harnessed by node operators. Furthermore, anyone can jump aboard the Validation process, provided they have the requisite bonds staked.

Features

- Decentralized and public: Unlike many of its peers, ZetaChain operates on a transparent, decentralized Prood-of-Stake framework, ensuring every transaction, even cross-chain ones, are open and trustworthy.

- Hyper-connected nodes: Each node on ZetaChain is a Universe in itself, observing every transaction on connected chains and verifying them just as any digital wallet would.

- Omnichain smart contracts: Unique to ZetaChain is its capability to deploy smart contracts that communicate with all chains, fostering a new era of app creation.

- Managed external assets: Assets across all chains come under ZetaChain's ambit, enabling seamless management just as if they were all on a single chain.

What problems ZetaChain solves

Cross-chain bridges, which are often used to move cryptocurrency from one network to another, have a number of drawbacks. These include unreliability, high costs, and lengthy transaction times.

Because both networks that are involved in the cryptocurrency transfer require gas payments, the cost is high.

The lengthy duration is due to the large number of intermediate steps required to complete such a move. The main issue, however, is the cross-chain protocols' flaws, which frequently result in crashes or hacking attacks. This harms the platform, its users, and the owners of wrapped tokens.

ZetaChain avoids the aforementioned issues primarily through its novel transfer method, which does not involve the use of wrapped tokens like WETH or stBTC. Instead of those tokens that are the subject of transfer, ZETA tokens are blocked when transferring cryptocurrency between networks.

The great part about ZetaChain is its structural infrastructure of how the transaction fees are determined. Although ZetaChain strives to support the transfer of assets across various blockchains, its gas fee has been a major challenge while interacting with many smart contracts simultaneously.

ZetaChain allows users to pay for all the fees integrated within one transaction. Hence, instead of a user having to pay the smart contract's mainnet fee and later interacting with the smart contract to also pay the gas fee, ZetaChain makes the whole process simple by combining all the fees.

Another offering that you should note with ZetaChain is asset handling. In most cases, multiple protocols that strive to be cross-chain or interoperable, need the user to change their main asset into a Wrapped version. For instance, wETH (Wrapped Ethereum), although these wrapped assets bring in a massive problem of smart exploits and it can be seen that depeg of stETH from the main Ethereum. ZetaChain resolves that too.

Hypothetically, ZetaChain resolves one of the main challenges that affect bridging. It ensures that no stored value is tied up in wrapped currency which may be vulnerable to infinite minting scams, like the $300 million Wormhole attack that drew the attention of mainstream media like CNBC.
When using the ZetaChain approach, no wrapped currency lays around waiting to be stolen.

They also appeared to have considered the risk of 51% attacks and had a smart contract set in place controlling ZetaChain supply.

Hence, ZetaChain offers the most general platform for decentralized cross-chain applications to design their projects with links to nearly all existing or future blockchains and L2/rollup, with access to the entire supply of native assets on these chains.

Key Metrics

ZetaChain's strides in the blockchain industry are remarkable. Even in its test phase, over 27k dApps grace its ecosystem, with an impressive 14 million cross-chain transactions. With its Ethereum-compatible virtual machine, zEVM, users can weave Omnichain Smart Contracts, seamlessly tying together assets across chains.

Layer 1 Blockchain

Blockchains have been influential in finance and technology over the last few years. But their functions and operations can be challenging to understand when so many different types exist.
The Key to understanding how blockchains work is to look at their "Layers".These include layers 0, 1, and 2, but this article only focuses on layer 1. So what is LAYER 1 blockchain and why is it IMPORTANT?

INTRODUCTION TO LAYER 1 BLOCKCHAIN

Layer 1 is the name given to a base blockchain like Bitcoin or Ethereum. It is the first level of the chain ecosystem and

corresponds to the main chain of the network. Layer 2 solutions and sidechains can be built on top of this basis that layer 1 provides.

This layer forms the protocol, which includes the consensus mechanism, network structure, security features, and transaction systems. It is a system that can operate independently and complete transactions without outside assistance.

Component of Layer 1 Blockchain

There are a few elements that layer 1 crypto blockchains require for their operation.

Consensus Mechanism

Blockchains are a decentralized system. There is no central authority that can verify whether a transaction is genuine or not. To combat this, blockchains use a consensus mechanism like proof of work or proof of stake. Under this system, users of the network itself participate in Validating transactions. This gives them the chance to add transactions to the blockchain and earn rewards for the services they provide.

DATA STRUCTURE

Blockchain is also known as a “ Distributed Ledger”. This indicates that its data is stored in the form of a publicly accessible ledger that records every transaction made on the blockchain. This ledger is replicated on each “node” or computer supporting the blockchain. This ledger can be seen and used by the public easily.

CRYPTOGRAPHIC PRIMITIVE

This is the component that handles data security, Since data is being stored and shared over thousands or millions of systems, it is essential to have a robust security system. Blockchains use cryptographic methods to accomplish this.

Most blockchains use asymmetric key cryptography to protect the network. This involves a pair of public and private keys that act as your username and password to the blockchain.
All transactions and information on a blockchain are encrypted and linked with these keys.

How Does Layer 1 Blockchain Work?

Suppose you want to make a transaction using a crypto token. The first step is to do this by opening a crypto

wallet. This wallet is a secured storage space for the private key tied to your public key.
Every transaction and crypto token you own is tied to this key.

Once you open the wallet, you must add crypto tokens to it. This can be done by purchasing them on a crypto exchange and transferring them to your wallet.
Next, you must obtain the public key of the receiver of the tokens you wish to send, then confirm the transaction. The transaction will soon be verified and finalized.

After the transaction has been made, it is added to a "block" or a collection of transactions. Each block is cryptographically protected and linked to the block that came before it, thus becoming a blockchain. Network validators then verify that the block is legitimate and add it to the blockchain as finalized. They then receive new crypto tokens as a reward for their invested time and effort.

Layer 1 Scaling

Unfortunately, most layer 1 blockchains do not scale well. The most popular blockchains, Bitcoin and Ethereum, can only reach speeds of 7 and 20 transactions per second respectively. This is nowhere near the sheer volumes that

are required by these networks to keep up with their daily functioning.

This failure is caused by the “Blockchain Trilemma”, a term coined by the founder of Ethereum, Vitalik Buterin. Every blockchain suffers a tradeoff between decentralization, security, and scalability. Most blockchain projects focus on decentralisation and security as those are the key parameters that make a network safe to use.

Scalability issues are usually resolved through the layer 1 scaling solutions. These can be layer 2 blockchains or sidechains that are built on top of L1 blockchains and use the same network security features but bundle several transactions and send them to the mainnet. This process can dramatically increase the volumes a blockchain can handle at any given time, with speeds being thousand of times higher than the base network.

Types of Layer 1 Blockchain Solutions

There are two main types, proof of work and proof of stake.

Proof of Work is the consensus mechanism used by Bitcoin, the oldest crypto token on the market. It involves validators - known as miners - using powerful computers

to solve cryptographic puzzles. The first one to find the solution gets to add a block to the chain and earns a reward for doing so.

Proof of Stake instead requires users to “stake” or lock in their tokens as collateral. Users are then randomly picked to verify blocks and add them to the chain. If they do not validate correctly, a portion of their collateral can be taken away, and successful validation results in a crypto reward.

Advantages of Layer 1 Blockchains

Decentralization

Decentralization is one of the main reasons why blockchains are so popular. There is no single authority that can make changes to the network. Instead, each user gets a stay in these changes.

Immutability

Once a transaction has been made, it cannot be reversed. Information on a blockchain cannot be changed or deleted, making the system more reliable.

Security

Blockchains are highly secure thanks to their cryptographic encryption. This makes them a worthwhile investment for many users.

Disadvantages of Layer 1 Blockchains

Scalability

As mentioned above, L1 blockchains are not very scalable. They usually require off-chain scaling solutions to be able to match user demand for the platform.

Energy Consumption

Proof of work blockchains is notorious for high energy consumption. Since they require powerful computers to run 24/7 solving cryptographic puzzles, they are also electricity hogs. This problem is mostly alleviated by proof of stake blockchains.

What are the Layer 1 Blockchain Examples?

Bitcoin

Launched in 2009, Bitcoin was the first crypto token in the market. It uses proof of work for Validation and popularised the use of blockchain for financial

applications. It redefined the industry by allowing users to transact anonymously from around the world.

Ethereum

Ethereum added more functioning to the blockchain industry by introducing smart contracts. These are sets of code that execute automatically when conditions are met. These are used extensively in dApps and Defi.

Solana

A third-generation blockchain, Solana seeks to address the scalability concerns of L1 blockchains. Unlike Bitcoin and Ethereum, Solana uses proof of History(PoH) consensus to reach transaction speeds as high as 65,000 per second.

Future of Layer 1 Blockchains

Layer 1 blockchains are here to stay. They have revolutionized finance and technology and are the most popular form of blockchains. While there are many concerns with their high costs and lack of scalability, they can be addressed through Sharding, new mechanisms, or even layer 2s. Their role in the payment systems of the future cannot be understated.

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ZetaChain Raises $27M for Interoperable Layer-1 Blockchain That Connects All Chains, Including Bitcoin, Cosmos, and Ethereum.

ZetaChain, the layer-1 blockchain that brings universal interoperability to crypto, has closed a $27 million equity funding round from a range of top participants. These participants in the equity round include *Blockchain.com, Human Capital, VY Capital, Sky9 Capital, Jane Street Capital, VistaLabs, CMT Digital, Foundation Capital, Lingfeng Capital, GSR, Kudasai, Krust, and others*.

The protocol created in 2021 is designed to provide standardization interoperability between networks, allowing non-smart contract chains to interact with the broader decentralized finance (DeFi) ecosystem. As a result, developers can implement smart contracts on networks not running the technology, such as Bitcoin and Dogecoin.

ZetaChain says it has seen more than 27,000 DApp contracts deployed on the platform from a diverse range of third-party applications, including cross-chain DeFi, nonfungible tokens, Web3 identity, and gaming protocols.

Over 13 million transactions have been performed on its testnet by over 1.7 million users, which has seen 13 million transactions completed to date.

ZetaChain's mission is to establish a new standard for blockchain interoperability and enable users to manage all of their assets and data from a single platform, regardless of the blockchain they were created or stored on, and without the need for bridges or wrapped tokens. This includes non-smart contract chains like the Bitcoin network and Dogecoin.
Standardization interoperability provides developers with significant advantages as they can manage a single contract for all chains and reduce the attack surface. ZetaChains's Ethereum Virtual Machine compatible smart contract layer and omnichain toolkit empower developers to seamlessly implement solely in Bitcoin, enabling them to utilize their Bitcoin within the broader DeFi ecosystem.

The platform has gathered some core contributors in the crypto space since its inception, including **Ankur Nandwani** (ex- Coinbase, Brave, and Ox), **Panuro Wu** (early contributor to the THORchain), and **Brandon Truong** (ex-BuzzFeed, Udacity, and Yada).
Several former employees of **Cosmos, Ignite, ConsenSys,** and other blockchain projects are also part of the core team.

"ZetaChain's purpose is to simplify managing assets and data across multiple blockchains, which remains a complicated and fragmented process that's hindering hundreds of millions of new users joining the web3 ecosystem, said **Ankur Nandwani, ZetaChain core contributor.** "*Our EVM- compatible cross-chain smart contracts alleviate these issues by allowing decentralized app developers to build services that are faster, more secure, and easy to use.*"