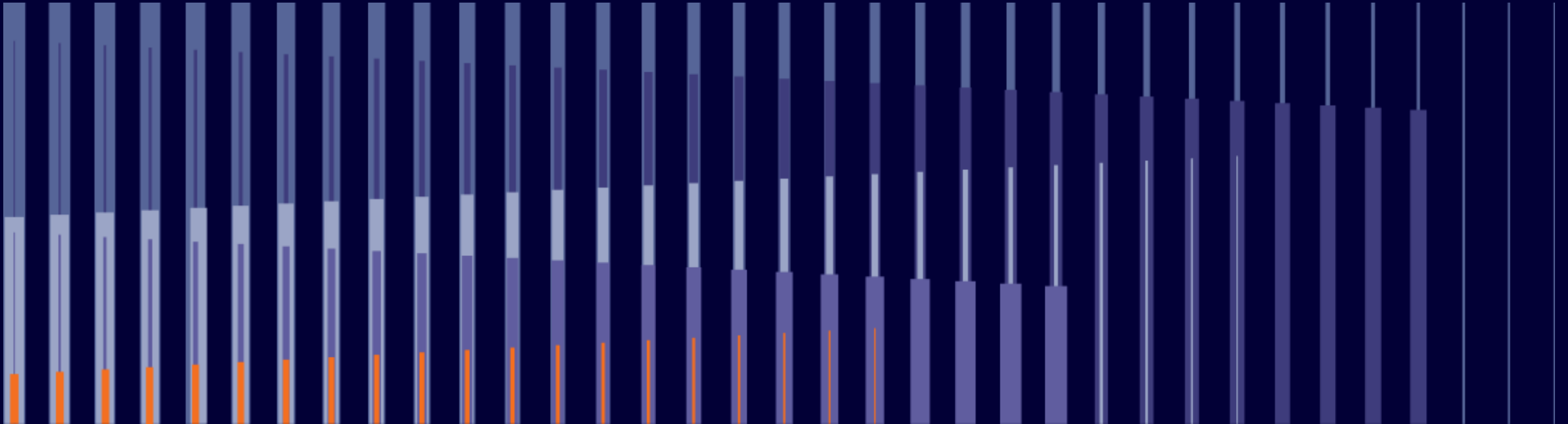


Official Report Axelar



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PROBLEM STATEMENT

The digital assets industry is a vibrant ecosystem with hundreds of different blockchains.

As developers can implement their ideas, methodologies and technologies in these blockchains, they vastly differentiate themselves from each other. Although this can be useful depending on your needs such as fast transaction processing or low transaction costs, they have created fragmented and isolated blockchains. As a result, data and assets can't freely flow through the ecosystem, lowering the user experience of users as transferring assets between networks can be challenging.

A common solution for this problem is the use of Bridges, which are smart contracts that lock assets on one network while creating a representation of this asset on the other. However, these bridges have their ecosystems, so the possibility of excluding certain networks. Furthermore, as these assets are locked in a smart contract, they form a security risk, the industry has already experienced various bridge hacks, causing enormous losses.

To solve this interoperability problem, Axelar provides a Proof-of-Stake blockchain that allows developers to create decentralized applications (dApps) that can operate across multiple blockchains by utilizing its network. The Axelar network is connected to over 50+ networks, allowing these dApps to communicate with all these networks and execute universal asset transfers. This approach increases the user experience as it provides an effortless method for users to tap into an interconnected ecosystem of blockchains.

SOLUTION

Axelar provides a unique infrastructure that consists of the Axelar network,

a PoS blockchain on which developers can create smart contracts and therefore dApps and just as any other blockchain users can interact with dApps and send/receive tokens on the Axelar network.

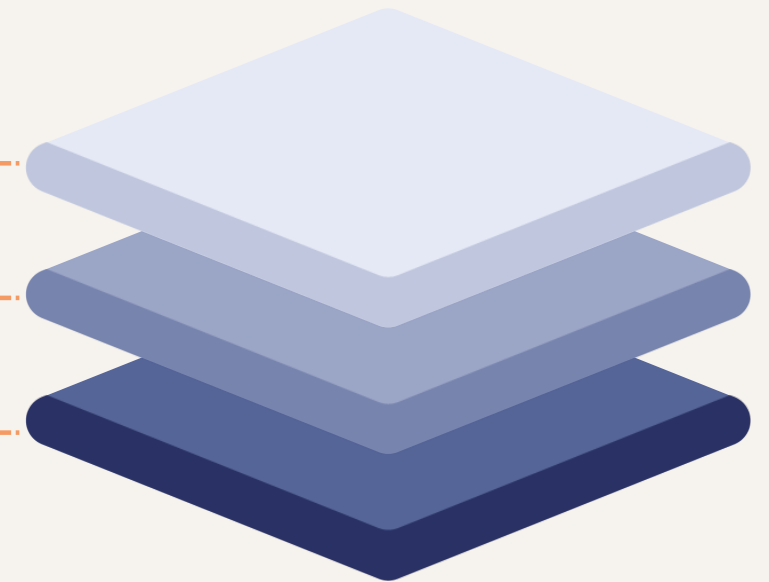
The added value of Axelar is that contracts created on the network are connected to Axelar's virtual machine, which acts as a cross-chain gateway protocol. This environment is connected to 50+ blockchains and allows users to interact with other environments through cross-chain token transfers, calling a smart contract on another chain or passing general, arbitrary messages across chains.

Furthermore, Axelar aims to achieve this interoperability through a developer-friendly Environment as it provides open-source development tools and templates to create these interoperable smart contracts. Together, they form an easily programmable infrastructure that is scalable and secure

Blockchains

Axelar *Virtual Machine*

Axelar *Network*



Source <https://axelar.network/>

"Interoperability is the biggest challenge for brands trying to enter the metaverse. The risk of betting in the wrong m-world and being left empty-handed in five years is real."

Simone Puerto, CEO of Futurist

To enable this interoperability network, Axelar leverages various technologies such as Gateway smart contracts, Axelar Virtual Machine and the General Message Passing protocol.

Installations on interconnected blockchains are referred to as gateways. These gateways function as smart contracts on Ethereum Virtual Machine (EVM) chains. Validators closely monitor incoming transactions from these gateways.

Once a consensus is reached among validators regarding the authenticity of a transaction, they proceed to write to the gateway of the destination chain, facilitating the execution of the cross-chain transaction. The fundamental infrastructure layer comprises these gateways and validators.

The Axelar Virtual Machine (AVM), powered by Cosmwasm, enables full-stack interoperability, transforming interoperability into a programmable layer, supporting services and tools that automate smart contract deployment and management across multiple blockchain ecosystems.

The Axelar Virtual Machine forms the foundation for two additional products that Axelar is introducing:

Interchain Amplifier: This is a permissionless model and service designed to enable effortless and seamless connections to the Axelar network and all its interconnected chains. With Interchain Amplifier, anyone can easily create a connection, contributing to the accessibility and interoperability of the Axelar ecosystem.

Interchain Maestro: Serving as an orchestrator, Interchain Maestro is a tool that developers can utilize to deploy and manage their multi-chain decentralized application (dApp) instantiations. This allows developers to adopt a "build once and run everywhere" approach, streamlining the deployment and management of their applications across the Axelar network and its interconnected chains.

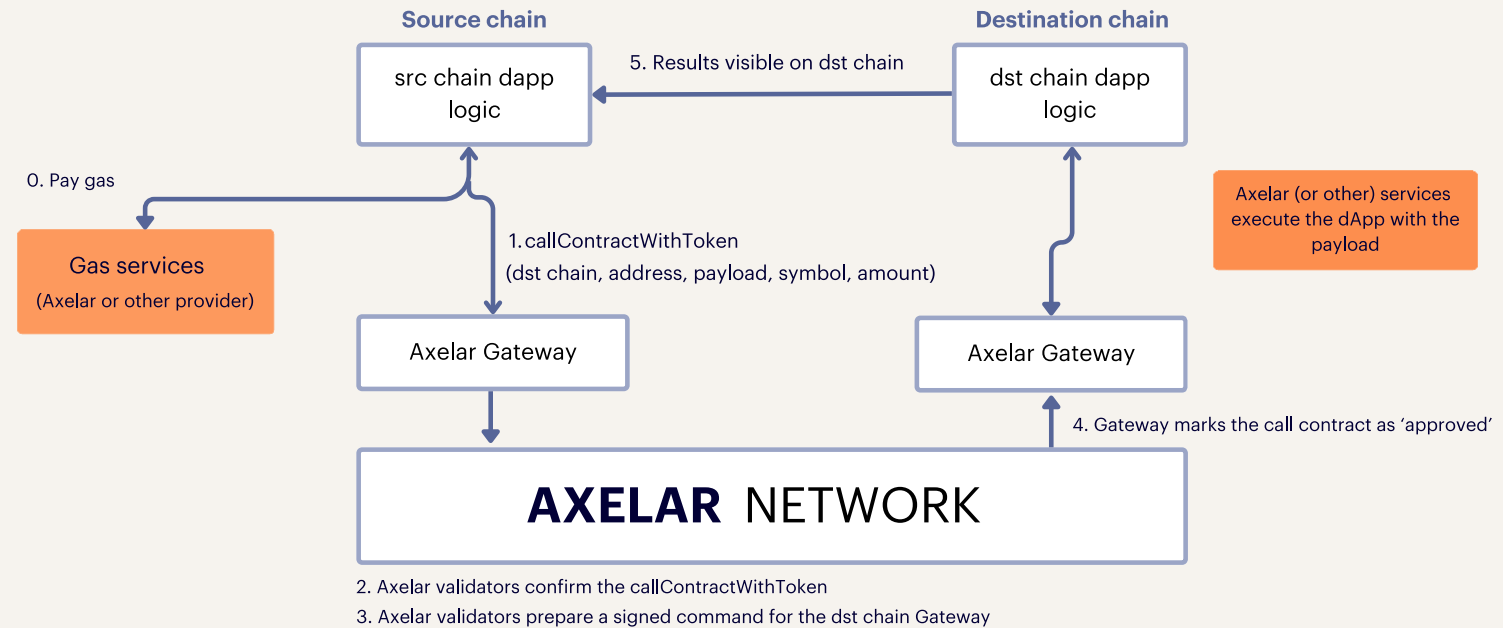
TECHNOLOGY (2/2)

The General Message Passing (GMP) protocol facilitates secure, Turing-complete cross-chain computation.

Axelar GMP introduces a groundbreaking approach in the blockchain industry by implementing the Axelar Executable interface, allowing developers to separate programs and assets. Users initiate a call function on the Source Chain, and through the Axelar Gateway, the call is confirmed, usage fees are deducted, and an outgoing transaction is prepared on the Destination Chain.

This Gateway-to-Gateway process, secured by proof-of-stake consensus with the \$AXL token, takes approximately 120 seconds. Axelar GMP revolutionizes Web3 by enabling the freedom to choose where programs and assets reside, breaking from the traditional constraints where they must coexist in a single environment.

This innovation fosters highly efficient, accessible, and dynamic blockchain applications, representing a paradigm shift in Web3's potential with the continued development and adoption of General Message Passing. Developers can explore Axelar GMP further in the technical documentation and engage in discussions on the Axelar Discord.



Source axelar.network/blog/an-introduction-to-the-axelar-network

ECOSYSTEM

DeFi



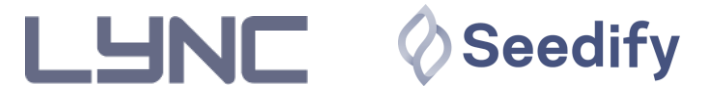
Infrastructure



Wallets



Gaming



Payments



NFT



Source <https://axelar.network/blog/an-introduction-to-the-axelar-network>

COMMUNITY

Since its inception in 2020, the interoperability solution has attracted a vast community and ecosystem, continuing its growth throughout the bear market.

117K
X

Since 2020, Axelar has attracted thousands of individuals and organizations to its ecosystem, this is also illustrated by its significant following on X, displaying an interest in interoperability.

+\$1.3M
Transactions

Since its main net launch, Axelar has executed and verified over 1,3M interchain transactions.

545

Interchain contracts

Within its ecosystem, Axelar has over 500 interchain smart contracts allowing users to tap into an ever-growing interconnected ecosystem with various use cases.

+150

Total Value Locked

Over the years, Axelar has connected increasingly more networks, which has the total value locked of the protocol to increase over \$200M. Axelar also has moved over \$100M to EVM networks and over \$110M to Cosmos.

MEET THE FOUNDERS



Sergey Gorbunov

FOUNDER

- Ph.D. in Computer Science at Massachusetts Institute of Technology
- Previously Chief Cryptographer at Algorand



Georgios Vlachos

FOUNDER

- Master's degree in Computer Science at Massachusetts Institute of Technology
- Previously Head of Mathematics at Algorand

TOKEN UTILITIES

The Axelar token, \$AXL, has several utilities within the network, reflecting its core role in facilitating a robust and multifaceted ecosystem:

Transactions Fees

Users use \$AXL to pay for transaction fees on the network. This is fundamental for the operation of the network, as these fees are used to compensate validators for processing transactions and maintaining the blockchain.

Staking Rewards

Token holders can stake their \$AXL to support the network's security and, in return, earn staking rewards. This incentivizes the holding of tokens and helps to secure the network through a proof-of-stake consensus mechanism.

Governance

\$AXL holders can participate in the governance of the network. This includes voting on various proposals that could range from technical upgrades to changes in governance policies, reflecting the decentralized nature of the network.

Validator Incentives

Validators, who are responsible for creating new blocks and maintaining the ledger, are incentivized with \$AXL tokens. This not only encourages the operation of nodes but also aligns the validators' interests with the health of the network.

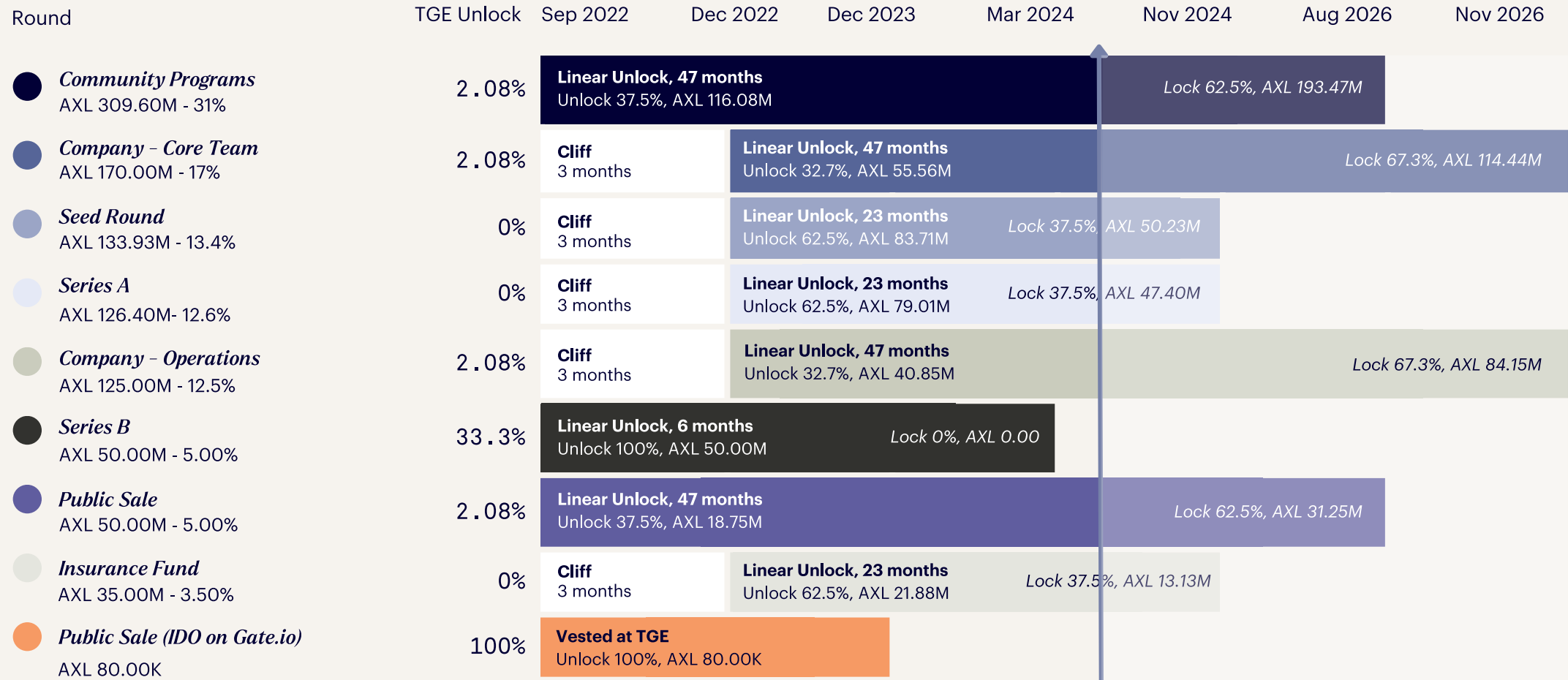
Interoperability

As a cross-chain communication platform, Axelar requires the use of \$AXL for operations that enable assets to move between different blockchains, making it an essential component of cross-chain transactions.

Developer Incentives

Developers building on Axelar may receive \$AXL tokens as incentives, encouraging the creation of new applications and services within the Axelar ecosystem.

TOKEN RELEASE



Source <https://cryptorank.io/price/axelar/vesting>

COINMETRICS

Insights into *Axelar*

- Token type: Native
- Current circulating supply: 611.626.553

General

Total supply	1,142,096,374
Maximum supply	∞
Market cap	\$1,295,821,223
Fully diluted market cap	\$2,419,743,215

ICO

Seed round	\$0,028
Series A	\$0.213
Initial Coin Offering	\$1.00

Pricing

Price in USD	\$2.12
All-time high in USD	\$2.64
All-time low in USD	\$0.3129
30-day Price range	\$1.44-\$2.64

On-chain data

Holders	5,384
Top 100 Holders	90.81%
Total Value Locked	\$183,33M

ROADMAP

- **Permissionless connections** for arbitrary chains via Interchain Amplifier, taking potential network effects out to the 100s of blockchains in the Ethereum L2verse.
- **Interchain Tokens** go beyond bridges, extending native fungibility and custom functionality across all connected chains.
- **A gas-burning mechanism** is on the AXL token governance roadmap, with the potential to turn the network deflationary, further securing the Axelar network.
- **Integrating diverse consensus approaches**, including Solana, Stellar, and Move-based chains like Aptos and Sui.
- **A gas-pricing overhaul** will improve the accuracy of services that estimate cross-chain gas fees over the Axelar network.

FINAL CONCLUSION

General remarks

Axelar is addressing a critical need in the blockchain ecosystem—interoperability. By facilitating seamless communication and transfer of assets across different blockchains, Axelar is positioned as a foundational layer that could significantly enhance the usability, efficiency, and scope of decentralized applications.

The use of a PoS blockchain, connection to 50+ networks, and a suite of developer tools underline a strong commitment to fostering an integrated blockchain environment.

Long term investment

As a long-term investment, Axelar looks promising with its fresh take on blockchain interoperability and a strong ecosystem, including big-name partnerships like Microsoft.

Its technology, especially the General Message Passing protocol, could set it up as a major player in Web3's future. But, like any blockchain tech, its success will depend on how much it catches on in the market regarding dominance, its continuous tech updates, and community support.

Risks and threats

Axelar faces the typical risks associated with any ambitious venture in the blockchain space. While it offers innovative solutions to enhance interoperability, it must remain vigilant against potential security threats.

Moreover, its success hinges on widespread adoption and the ability to stay ahead of the competition in a rapidly evolving landscape. Despite these challenges, Axelar's unique approach and strong ecosystem partnerships position it well for future growth and development.

HODL

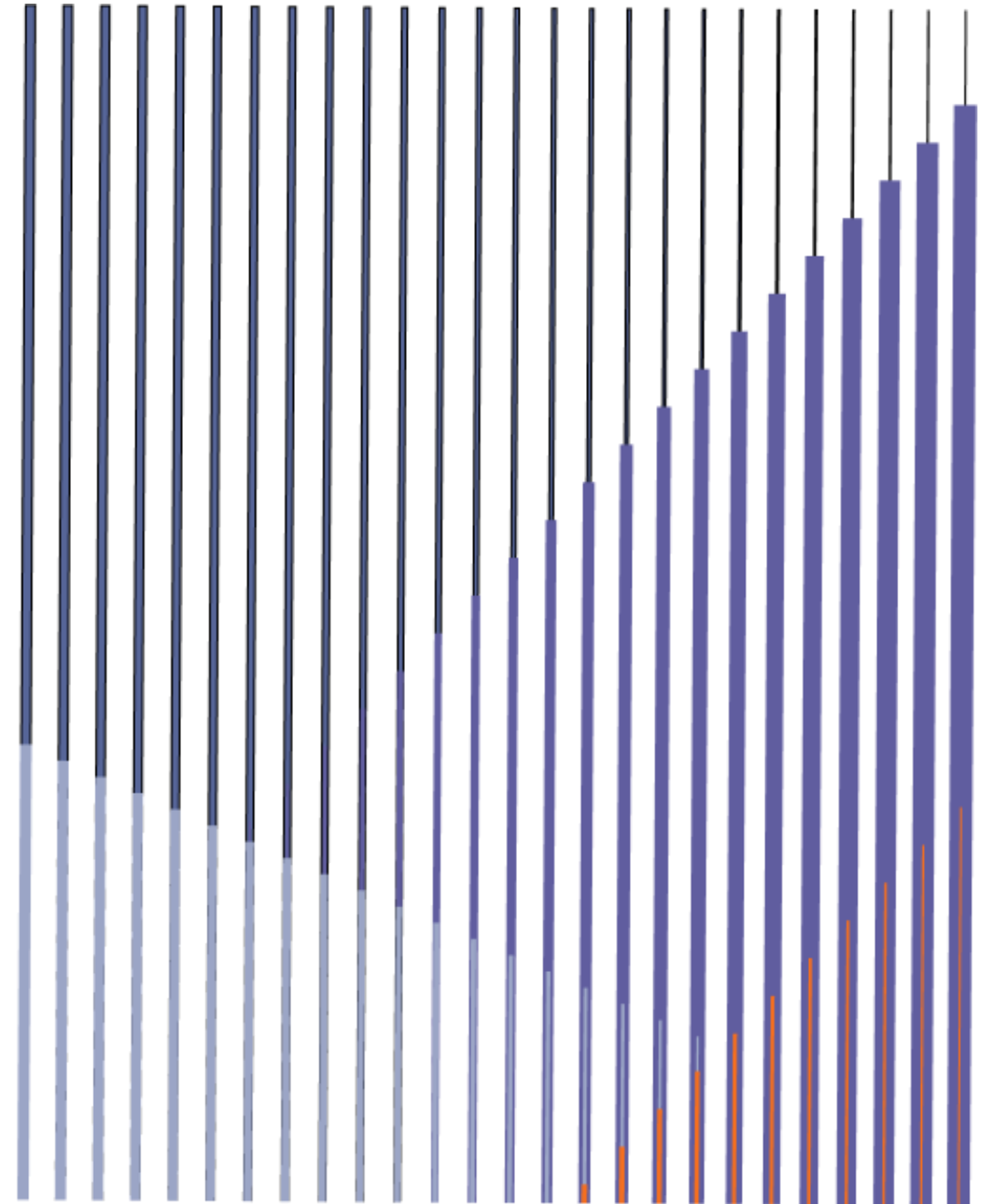
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