I was looking for information about Ethereum scaling, when I realized the problem was already solved.

1. Execution layer:

Polynya website explains how and why Rollups are the solution to the scaling of the execution layer.

StarkWare head of Engineering also explains how recursive rollups would enable to reach hyper-scalability, with a fractal structure : "Fractal Scaling: From L2 to L3"

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fractal

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[(https://ethresear.ch/uploads/default/original/2X/0/05925bee93309b0e0f48e5cba6f7f6d2c6c45311.jpeg)

L2 Rollups already succeeded to reduce fees by 90 % - 95 %.

In my opinion, L3 Rollups are very important because they will be able to process mass micro-transactions with zero fee.

This is exactly what is needed because it means any influencer will be able to develop a micro-economy around him / her, by creating, giving or selling a fan token.

Fans will be able to transfer token for free between each others, without having to purchase any Ether and even without being aware the fan token is secured by L1 Ethereum.

The L3 Rollup may just ask the fan to fill a captcha or to watch an ad from time to time, to pay for the service.

Rollups are such a good solution that many other blockchainscould become Ethereum Rollups.

1. Data layer:

As explained once again on Polynya, data shards will provide scaling for the data layer.

1. Conclusion:

As a result, since scaling is no more an issue, L1 Ethereum can focus on decentralization and security / consistency.

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Ethereum could also focus on making things easier for Rollups to interact with L1 Ethereum and other Rollups.