



Authored by:  
**Christian Hazim**

Date: November 8, 2023  
Topic: **Digital Assets**



# Introducing Base: Coinbase's Solution to Scaling Ethereum

While Ethereum is the leading public smart contract blockchain, its widespread popularity, transaction limitations, and variable demand levels can lead to network congestion and increased costs. These high costs often render small transactions impractical and pose obstacles to developing new use cases. For Ethereum to become a globally adopted data settlement platform, there is a growing need for solutions that can enhance transaction speed and reduce costs without compromising the network's security.

Layer 2 (L2) networks such as Base offer pathways to ease the computational burden on the Ethereum network. Developed by Coinbase, one of the largest offchain cryptoasset exchanges globally, Base is built for speed, affordability, and user-friendliness. In this blog post, we explore the successful early adoption of Base following its launch in July 2023 and how it is contributing to Ethereum's growth.

## Key Takeaways

- Base aims to scale Ethereum by expanding its reach and providing a more efficient, affordable, and user-friendly experience.
- Fuelled by Coinbase's strong brand, L2 technology adoption, and Base's considerably lower transaction costs compared to Ethereum, adoption has happened quickly as Base has onboarded 100,000 daily active users faster than any other L2 network.<sup>1</sup>
- Base represents a strong show of commitment to Ethereum by Coinbase and positions the exchange to benefit from the growth of Ethereum's onchain ecosystem.

## Base Unveils New Avenues that Expand the Ethereum Ecosystem

Imagine Ethereum as a bustling boulevard replete with businesses of all types. Potential patrons of these businesses visit the boulevard in their cars but find themselves stuck in traffic due to inadequate infrastructure to handle the influx of vehicles. Meanwhile, a new train system running parallel to, but seamlessly integrated with the main boulevard makes its debut, providing a swift and cost-effective means of transport for these travellers, and a means of alleviating some of the road traffic.

Now, instead of travellers sitting in traffic and paying high tolls, the train works to spread the cost out among a larger group of people, with individuals paying only a minimal fee for the convenience of boarding and disembarking at a station of their choice. This system not only alleviates traffic congestion but also enhances affordability, thereby improving the overall ecosystem's efficiency and expanding the available navigation space.

Just like trains help to alleviate traffic on the boulevard, L2s play a crucial role in alleviating network congestion on Ethereum. They work by shifting the execution of transactions away from the Ethereum chain and onto adjacent networks. Periodically, they consolidate these transactions into a single cryptographic proof and post the proof to Ethereum as a single transaction. This innovative approach not only ensures that activity on L2 networks inherit the security assurances of Ethereum, but also expands the Ethereum ecosystem's transactional throughput while reducing average user costs.



In this context, Base is one of a growing number of L2 networks that extends the surface area of Ethereum and embraces ether (ETH) as the denominating currency within the ecosystem. What sets Base apart is its unique position as the first L2 network supported by a well-established public company committed to advancing crypto adoption.

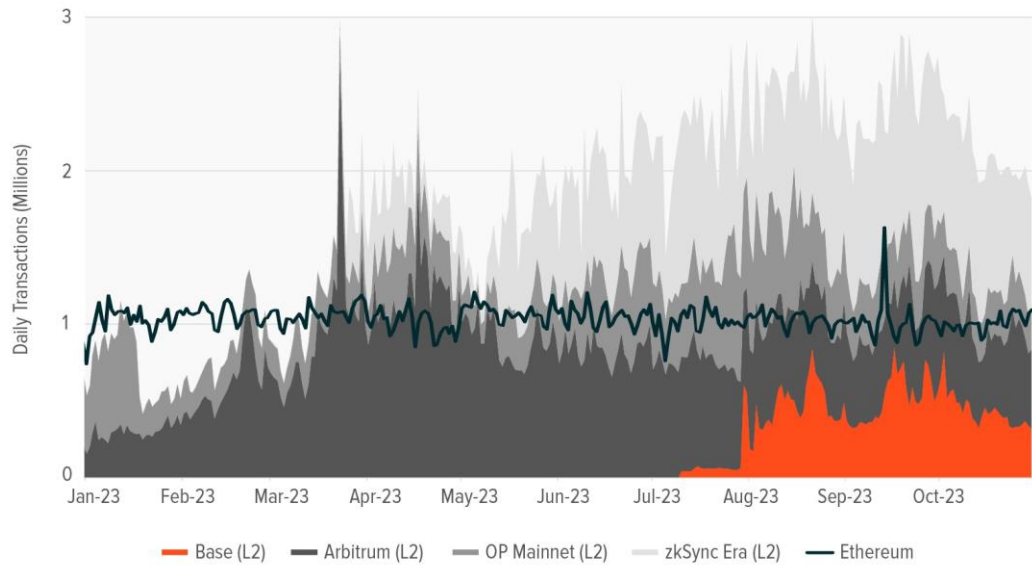
Coinbase unlocks access to a vast user base and over \$130 billion in assets on its exchange platform.<sup>2</sup> Furthermore, it offers a comprehensive suite of tools and infrastructure for developers to harness. For example, application developers have access to a range of integrations, including fiat onramps, a bridge to its widely adopted mobile app, and a user-friendly self-custodial wallet. Similarly, for users, Base is expected to simplify the blockchain experience as Coinbase streamlines interactions with these applications through direct in-app integrations.

### Base Gains Strong Momentum as Transactions Migrate from Ethereum to L2 Networks

Early indications are that L2 networks like Base have found strong product-market fit. The clearest evidence of this is that over 2 million daily transactions are now facilitated by L2 networks. Much of this migration can be attributed to the much lower costs of using L2s. Base, for example, charges an average transaction fee of \$0.31 for a ~\$200 USDC stablecoin transfer, a ~94% reduction over Ethereum's current fee of \$5.02.<sup>3,4</sup>

#### THE MOST WIDELY ADOPTED L2 NETWORKS ALREADY SURPASS ETHEREUM IN DAILY TRANSACTIONAL ACTIVITY

Sources: Global X ETFs with information derived from Arbiscan.io, Dune.com, Etherscan.io, and Optimistic.etherscan.io as of October 31, 2023.



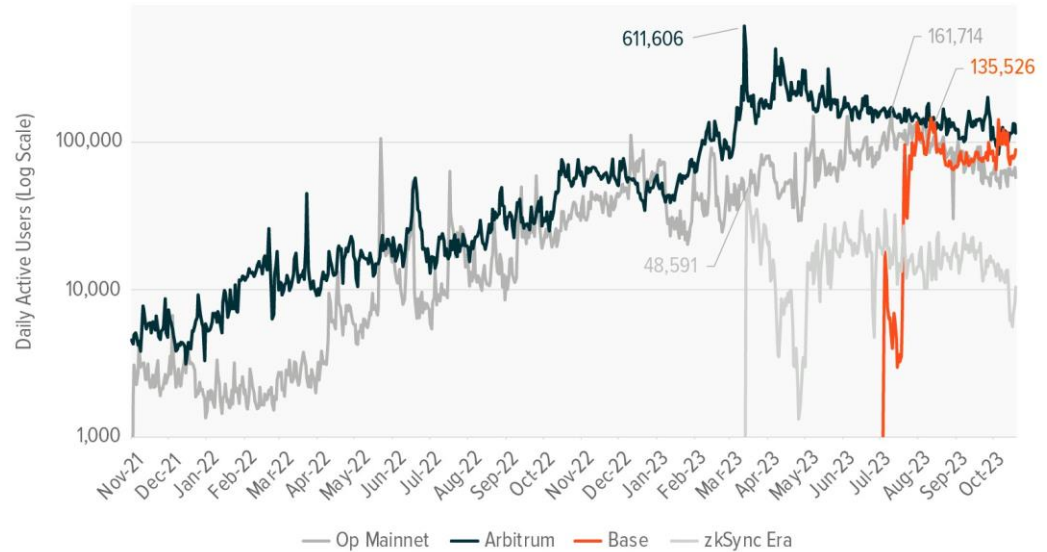
Further, in just three months as a live network, Base has grown its user base to more than 2.5 million addresses.<sup>5</sup> Undoubtedly, Base's rapid growth has been driven by increasing awareness of and familiarity with L2 networks over the past two years, as well as by the significant technological advancements that have been made within scaling technology during this time. Coinbase has also made the marketing of Base a strategic priority.



As the ecosystem of available applications on Base expands and the user experience continues to improve, it is expected that Base’s active user base will continue to grow.

**BASE ONBOARDED OVER 100K DAILY ACTIVE USERS IN LESS THAN A FEW WEEKS**

Sources: Global X ETFs with information derived from Dune.com as of October 31, 2023.



At present, more than \$565 million has been transferred onto Base by its active user base, making it the third largest L2 network behind only Arbitrum and Optimism which have \$6.5 billion and \$3 billion in assets deposited on their network.<sup>6</sup> The majority of this value periodically engages with a diverse range of applications, mostly consisting of onchain financial services and novel social platforms.

**Base Solidifies Coinbase's Commitment to Ethereum and Paves the Way for New Business Horizons**

Base symbolises Coinbase's vote of confidence in Ethereum and a commitment to expand the network. Coinbase is well-positioned to make Ethereum more accessible, reducing the barriers for users to engage with the sea of available applications and providing developers with the tools to contribute to the ecosystem’s growth more easily and effectively.

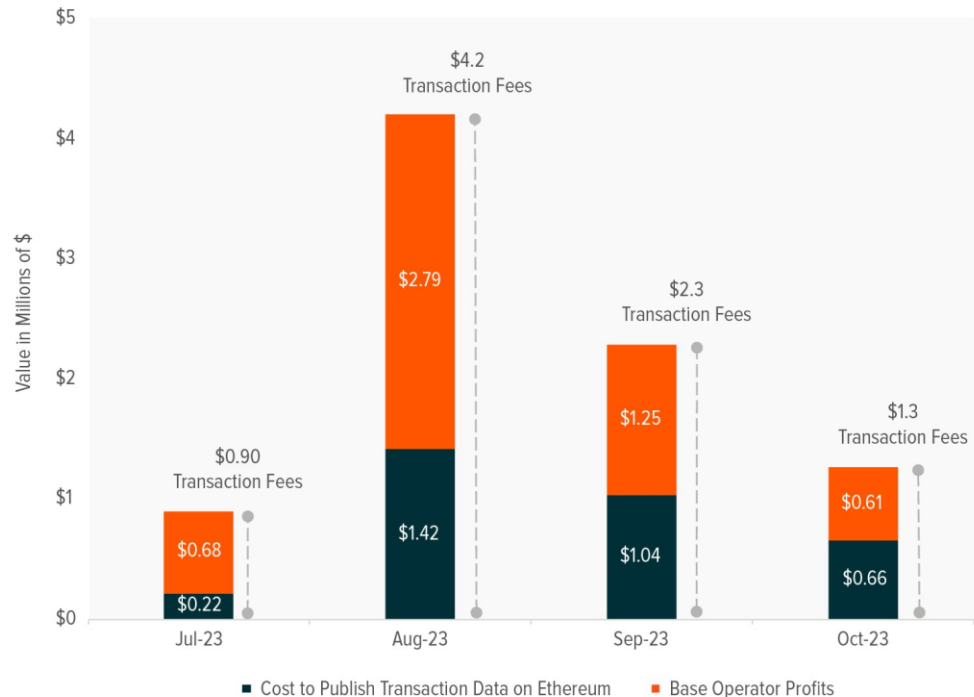
This commitment not only strengthens Ethereum's ecosystem but strategically positions Coinbase to explore novel business opportunities. As Base is used, cryptographic proofs summarising network activity must be submitted and settled on the Ethereum network. Coinbase currently manages the data relay process, referred to as the sequencer, and can capitalise both by ordering transactions as well as on the margin between fees charged for offchain transaction execution and the costs associated with settling batches of transactions on Ethereum.

To date, Base has generated approximately \$5.3 million in profit through these operations.<sup>7</sup> As user activity on Base continues to grow, it is expected that the profits earned from these activities will grow in kind. Eventually, the task of operating the L2 sequencer and relaying transactions back to Ethereum is poised to become a collaborative effort involving multiple parties, thus, an eventual distribution of these profits beyond Coinbase is anticipated.



## WHILE STILL IN ITS EARLY STAGES, OPERATING THE BASE SEQUENCER HAS OFFERED FINANCIAL REWARDS

Sources: Global X ETFs with information derived from Dune.com as of October 31, 2023.



Operating Base presents a fresh opportunity for Coinbase, but there may be additional avenues to explore. By having access to a user's first touch point into Base via its mobile app and wallet infrastructure, Coinbase can strategically implement design choices and processes to extract fees and generate value. For example, this could involve earning fees by providing a fiat onramp for applications deployed on Base and implementing backend fees for streamlining user experience processes that simplify user interactions with these applications. Looking ahead, Coinbase may even explore the development of its own fee-generating applications, further contributing to the growing ecosystem of the Ethereum network.

### Conclusion: Base is an Acknowledgment of Ethereum's Vision and We Believe a Key Player in Advancing Crypto Adoption

Ethereum needs alternative pathways to improve network efficiency and affordability, and Base is a prime example of such an alternative. Marking a significant milestone in the maturation of Ethereum, Base embodies the ongoing progress in open-source L2 software while benefiting from Coinbase's expertise and large user base. By positioning itself as an accessible gateway to the Ethereum ecosystem, Base is expected to provide users with a streamlined and user-friendly experience, making the Ethereum ecosystem more approachable for the masses.

The launch of Base also highlights how companies like Coinbase can contribute to Ethereum's scalability and unlock new business opportunities. With Base, Ethereum takes a step closer to becoming an integral part of our digital lives, while Coinbase solidifies its trailblazing role in the industry.



**Footnotes**

1. Dune.com (n.d.). TK Research Base Mainnet (Bridges, Network Activity, Fees/Revenue and DEX Stats). Accessed on October 31, 2023.
2. Base.org (n.d.). Making Ethereum accessible to everyone. Data as of and accessed on October 31, 2023.
3. Basescan.org. (n.d.). Transactions Hash - 0x6b88d45fc7cf8056d89685592aab2dbe624205561116e901adf0cf45a9f27462. Data as of and accessed on October 31, 2023.
4. Etherscan.io (n.d.). Transaction Hash - 0xb4473ecde852efb7ee2ecb92375e4edc9792995baca3d1700921c859b9e2221b. Data as of and accessed on October 31, 2023.
5. Dune.com (n.d.). TK Research Base Mainnet (Bridges, Network Activity, Fees/Revenue and DEX Stats). Accessed on October 31, 2023.
6. L2beat.com (n.d.). Value Locked. Data as of and accessed on October 31, 2023.
7. Dune.com (n.d.). Niftytable – Rollup Economics. Data as of and accessed on October 31, 2023.

**The value of an investment may go down as well as up and past performance is not a reliable indicator of future performance.**

**Trading may not be suitable for all types of investors as they carry a high degree of risk. You may lose all of your initial investment. Only speculate with money you can afford to lose.**

**Changes in exchange rates may also cause your investment to go up or down in value.**

**Tax treatment depends on the individual circumstances of each client and may be subject to change in the future.**

**Please ensure that you fully understand the risks involved. If in any doubt, please seek independent financial advice. Investors should refer to the section entitled “Risk Factors” in the relevant prospectus for further details of these and other risks associated with an investment in the securities offered by the Issuer.**

**This information is not intended to be, or does not constitute, investment research.**

These insights are strictly for general information purposes provided at the date of publication and may change without notice and are not a recommendation, solicitation or offer to buy or sell any financial products or to adopt any approach to investment. There is no guarantee that any matter discussed will be successful. Reliance on any part of this information is at your own discretion.

This information may provide estimates and future forecasts and are not a representation of any future performance. This information is not complete or exhaustive and we make no representations or warranties, express or implied, concerning the accuracy or comprehensiveness of these insights.

These insights do not take into account a person’s own financial position or circumstances of any person or entity in any region or jurisdiction. This information should not be relied upon as a primary basis for any investment decision. Its applicability will depend on the particular circumstances of each investor.

This information does not constitute tax advice and investors and potential investors are advised to consult their professional advisors concerning possible taxation or other consequences of purchasing, holding, selling, converting or otherwise disposing of any investments under the laws of the relevant region and/or their country of incorporation, establishment, citizenship, residence or domicile, or other liability to tax and in light of their particular circumstances.

Past performance is no indication of current or future performance. The performance data does not take account of the commissions and costs incurred on the issue and redemption of units.

*Communications issued in the European Union relating to Global X UCITS ETFs are issued by Global X Management Company (Europe) Limited (“GXM Europe”) acting in its capacity as management company of Global X ETFs ICAV. GXM Europe is authorised and regulated by the Central Bank of Ireland. GXM Europe is registered in Ireland with registration number 711633.*

*Communications issued in the United Kingdom and Switzerland in relation to Global X UCITS ETFs are issued by Global X Management Company (UK) Limited (“GXM UK”), which is authorised and regulated by the Financial Conduct Authority. The registered office of GXM UK is 77 Coleman St, London, EC2R 5BJ, UK. Information about us can be found on the Financial Services Register (register number 965081)*

**Information for Investors in Switzerland**

*This is an advertising document. The state of the origin of the fund is Ireland. In Switzerland, the representative is 1741 Fund Solutions AG, Burggraben 16, CH-9000 St.Gallen. The paying agent is Telco AG, Bahnhofstrasse 4, 6430 Schwyz.*

*The prospectus, the key information documents, the articles of association as well as the annual and semi-annual reports may be obtained free of charge from the representative.*

*Past performance is no indication of current or future performance. The performance data do not take account of the commissions and costs incurred on the issue and redemption of units.*

