

# Optimism Badgeholder On-Chain Analysis

## Summary

Optimism Badgeholders play an essential role in fueling the next generation of talent by rewarding current impactful work within the Optimism Collective and incentivizing the continuation of such work. For this reason, it is important to understand how Badgeholders compare to typical active OP users

. This knowledge will help governance make informed decisions in the design and expansion of the Citizen's House while providing transparency to the public about the voters in the OP Collective. When looking at Badgeholders from the first three rounds of Retro Funding voting, we found that a higher percentage of OP Badgeholders are active in other DAOs, are involved in the creation of NFTs and Smart Contracts and have verified Farcaster accounts in comparison to a control group of active users.

This study was done in conjunction with the Optimism Foundation as part of a [Foundation Grant](#). All source data and charts can be referenced at [this dune dashboard](#).

## Introduction

Optimism Badgeholders have been an essential part of the Collective since the inception of the Citizen's House, playing a key role in voting on important governance decisions such as the design and distribution of Retro Funding. Through these votes, they have been responsible for distributing over 50 million OP tokens during Retro Funding (RF) rounds. This makes their participation crucial in rewarding impactful work and encouraging continued contributions within the OP Collective. To better understand the influence of Badgeholders and ensure governance decisions are made transparently and equitably, it is important to compare them to typical active OP users. Here we explore OP Badgeholder's transaction activity, governance participation, social app usage and smart contract deployment to better understand the characteristics of OP Badgeholders.

## Methods

Our work includes the 132 Badgeholder addresses that acted as voters for Round 3. It is important to note that Badgeholders may hold other addresses and may not exclusively conduct their blockchain activity using the address linked to their Badgeholder status. Indeed, four Badgeholders had only one transaction associated with their address, and 17 had fewer than 10 transactions. However, a substantial portion—31 Badgeholders—were highly active, with more than 1,000 transactions linked to their address.

We built a representative control group by selecting all non-Badgeholders addresses that conducted at least five transactions on Optimism in the last three months. This threshold was chosen to capture active users while avoiding including inactive or irregular participants. This resulted in a control group of approximately 1,160,000 addresses. We decided to use relatively broad qualifications for the control group to see best how Badgeholders compared to typical active Optimism users. For finer-scale comparisons and statistical tests, we used a random subset of 1,000 users from the control group. This subset was randomly selected from the larger control group. In cases where this smaller control group was used, it will be referred to as the subset control group.

## Results

As of August 15th, 2024 OP Badgeholders had completed 150,343 transactions, with 57,909 (39%) on OP Stack Chains vs 92,434 (61%) on non-stack chains. Badgeholders had a median of 315 total transactions, with a median of 56 on-chain transactions and 237.5 non-OP stack chain transactions.

### Transaction Activity

The largest percentage of Badgeholder transactions occurred on Ethereum (43%), followed by Optimism (27%). In contrast, the control group had its highest transaction percentage on Optimism (23%), with Polygon coming in second (20%). Notably, in the last month (August 2024), the most frequent chain for Badgeholder transactions was to Base (33%), with Optimism following closely at 26%. The control group showed a had most of its transactions in Optimism (32%) with Base in second at 25%.

[

image

1802x792 48.2 KB

](https://europe1.discourse-cdn.com/bc41dd/original/2X/6/6134f6337b3da9604c6ecec52bd03b3f03f8685c.png)

[

image

1802×792 50.4 KB

](https://europe1.discourse-cdn.com/bc41dd/original/2X/c/c8390c75b7b0aa8c0ecbc1266fdf30c8e8543353.png)

When comparing OP Stack chain activity between groups, 39% of Badgeholder transactions occurred on OP Stack chains with a similar 40% of control group transactions occurring on OP Stack Chains. However, in August 2024, both groups showed a higher level of OP Stack chain engagement, with 60% of Badgeholder transactions and 62% of the control group's transactions occurring on OP stack chains. This suggests that both groups may be increasingly prioritizing OP Stack chains.

[

image

1322×688 37 KB

](https://europe1.discourse-cdn.com/bc41dd/original/2X/d/d21df168b05176a0babe91e20c708c92abe8f4d5.png)

## DAO Participation

Badgeholders exhibit significantly higher involvement in governance across multiple chains. Badgeholders were more active in ENS (7%) and Uniswap (3%) DAOs compared to the control group, which had less than 1% participation in both DAOs. Overall similar percentages of Badgeholders and members of the control group are active in Arbitrum DAO. However, among the top 300 members of the Arbitrum DAO, 2% of Badgeholders held prominent positions ( $p < 0.0001$ ), a percentage far exceeding that of the control group. All of these patterns suggests that Badgeholders are highly influential in cross-ecosystem governance.

[

image

974×792 36.6 KB

](https://europe1.discourse-cdn.com/bc41dd/original/2X/f/fc780a28e9c4c20d871b24d52c4797fa33eed9c.png)

[

image

974×792 35.4 KB

](https://europe1.discourse-cdn.com/bc41dd/original/2X/a/adf0d5b0e446b81488112a770d051c53b5052277.png)

## Social App Usage

Over half of Badgeholders (59%) hold verified Farcaster accounts, a large contrast to just 12% in the control group. On other social applications both Badgeholders and the control group show low rates of engagement, less than 10% have Lens profiles and less than 1% have traded Friendtech shares.

[

image

1228×792 39.7 KB

](https://europe1.discourse-cdn.com/bc41dd/original/2X/6/67038f529355e76c44700a86c37599aceb6d9aad.png)

[

image

1228×792 36.9 KB

](https://europe1.discourse-cdn.com/bc41dd/original/2X/0/0c7c1b079cbb99d78715e08fa34baecf4172f8.png)

## NFT & Smart Contract Activity

Badgeholders are significantly more likely to hold NFTs, with 53% owning NFTs compared to 38% of the control group. Additionally, Badgeholders demonstrated a higher rate of smart contract creation on Optimism with 9 Badgeholders creating

a total of 22 smart contracts. This indicates that Badgeholders are not only active in governance but also contribute more to the technical development of the ecosystem.

[

image

2496×792 55.8 KB

](https://europe1.discourse-cdn.com/bc41dd/original/2X/0/080442a8499029d04bae13cdaf0a4d46f461d528.png)

## Conclusions

In conclusion, Badgeholders in the Optimism Collective demonstrate a unique pattern of activity compared to typical active OP users. They are more engaged in governance across multiple DAOs, significantly more active on social platforms like Farcaster, and more involved in NFT creation and smart contract deployment. Though their transaction behavior on different chains varies slightly from that of the control group, both groups show similar percentages of transactions on OP Stack Chains. We hope that this dashboard and these findings will help inform the design of future Retrofunding rounds, and that the comparison to typical active wallets will help provide more context in the decisions around guest voting that will happen in Retrofunding Round 6.

**The full dune dashboard can be found [here](#).**