On-Chain Data Analysis Report: New Users on BAYC Smart Contract

Analysis Objective

Analyze the daily trend of new users interacting with the BAYC smart contract over the past 90 days to understand growth patterns, activity spikes, and user behavior.

Data Period

- Date: April 2025 - July 2025
- Data source: Google BigQuery public dataset (bigquery-public-data.crypto_ethereum.transactions)
- Smart contract address: 0xbc4ca0eda7647a8ab7c2061c2e118a18a936f13d

Visualization Results

- The graph shows fluctuations in the number of new users per day.
- Highest peaks around late April and mid-May 2025.
- Trend declines in June and rises slightly again in late June to early July.

Key Insights

- Activity spikes in April and May likely triggered by new minting events, airdrops, or community hype.
- Significant decline in June possibly due to a bearish crypto market or fewer campaigns.
- Recovery in late June - early July suggests renewed interest or rumors attracting new users.

Average New Users

- Daily average: around 10-15 new users.
- Highest peak: >30 new users.
- Lowest: about 3-5 new users.

Business Interpretation

- New user activity is highly responsive to community events.
- BAYC team could launch periodic campaigns to maintain user acquisition.
- Recommend analyzing retention: whether new users remain active or only make one transaction.

Methodology

- Used SQL query in BigQuery to count unique daily users.
- Visualization with Python (matplotlib) in Google Colab.
- Transparent and open dataset.

Conclusion

The BAYC smart contract continues to attract new users despite fluctuations. Spikes are driven by campaigns/events, while declines occur during fewer updates or bearish periods. This data can support future strategic planning.

Further Recommendations

- Analyze new user retention.
- Segment users (whales vs. retail).
- Analyze correlation with NFT price and marketplace activity.