

Digital methods for Blockchain Research^{1/3}

How to map social media airdrop vernaculars with methods of query design?

Project context

The study of Airdrop farming presents an opportunity to dive deeper into the latest trends in how crypto-finance is a realm of social interaction that can be studied via digital methods, to gain insights into both the digital cultures they create and the economic imaginaries they enact.

Method background

In digital humanities and social sciences, blockchain research has primarily focused on conceptual frameworks. The development of quali-quantitative digital methods (Omena et al., 2024; Venturini, 2024) to study blockchain technology with and about social media and web3 environments is still under investigation.

Investments

\$2.55 Trillion (invested)
500 Million (investors)

Global presence

Main countries investing in Blockchain

United States, Korea, Switzerland, Singapore
United Kingdom, China

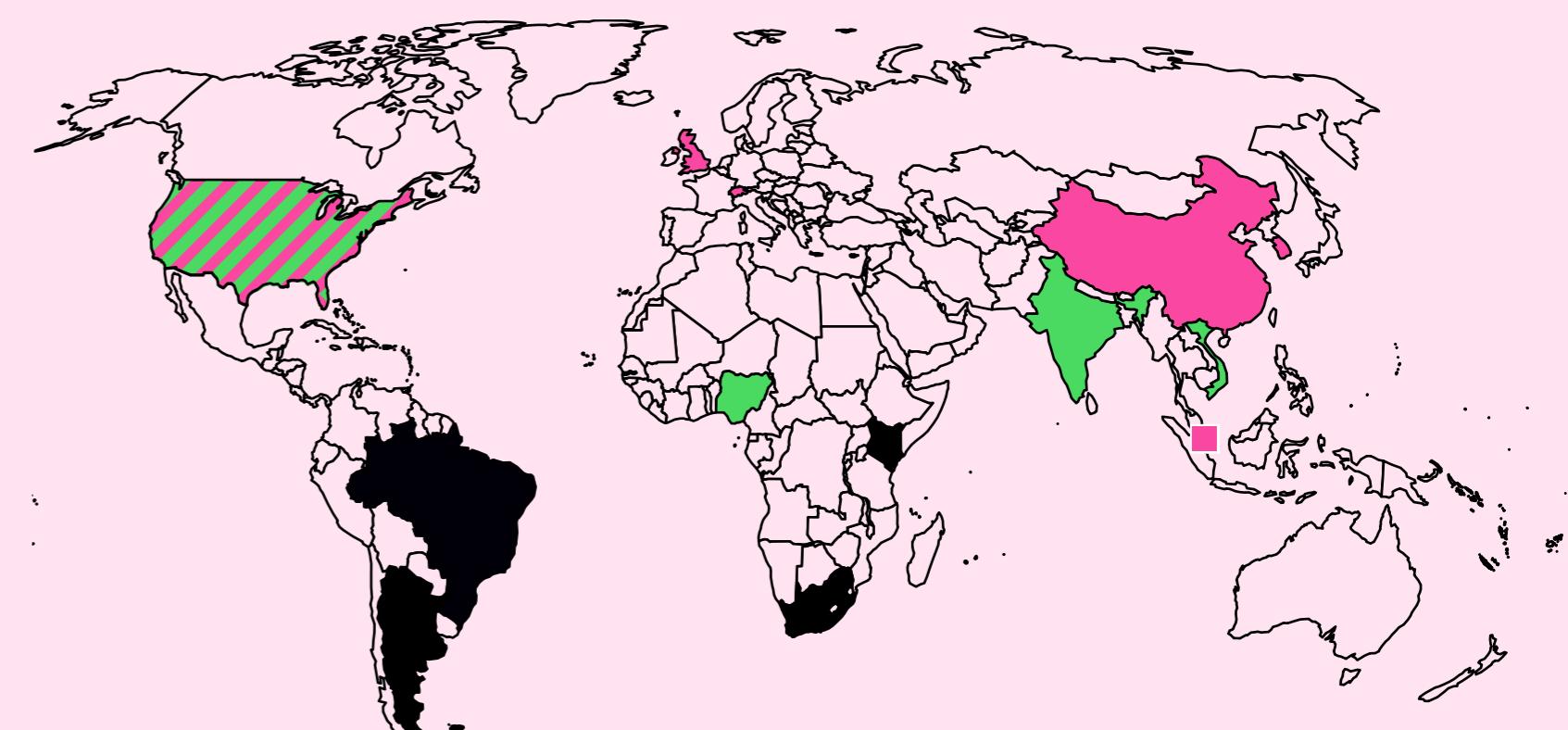
Crypto adoption have been on the rise

India, Nigeria, Vietnam, United States

May also emerge as key players in the future

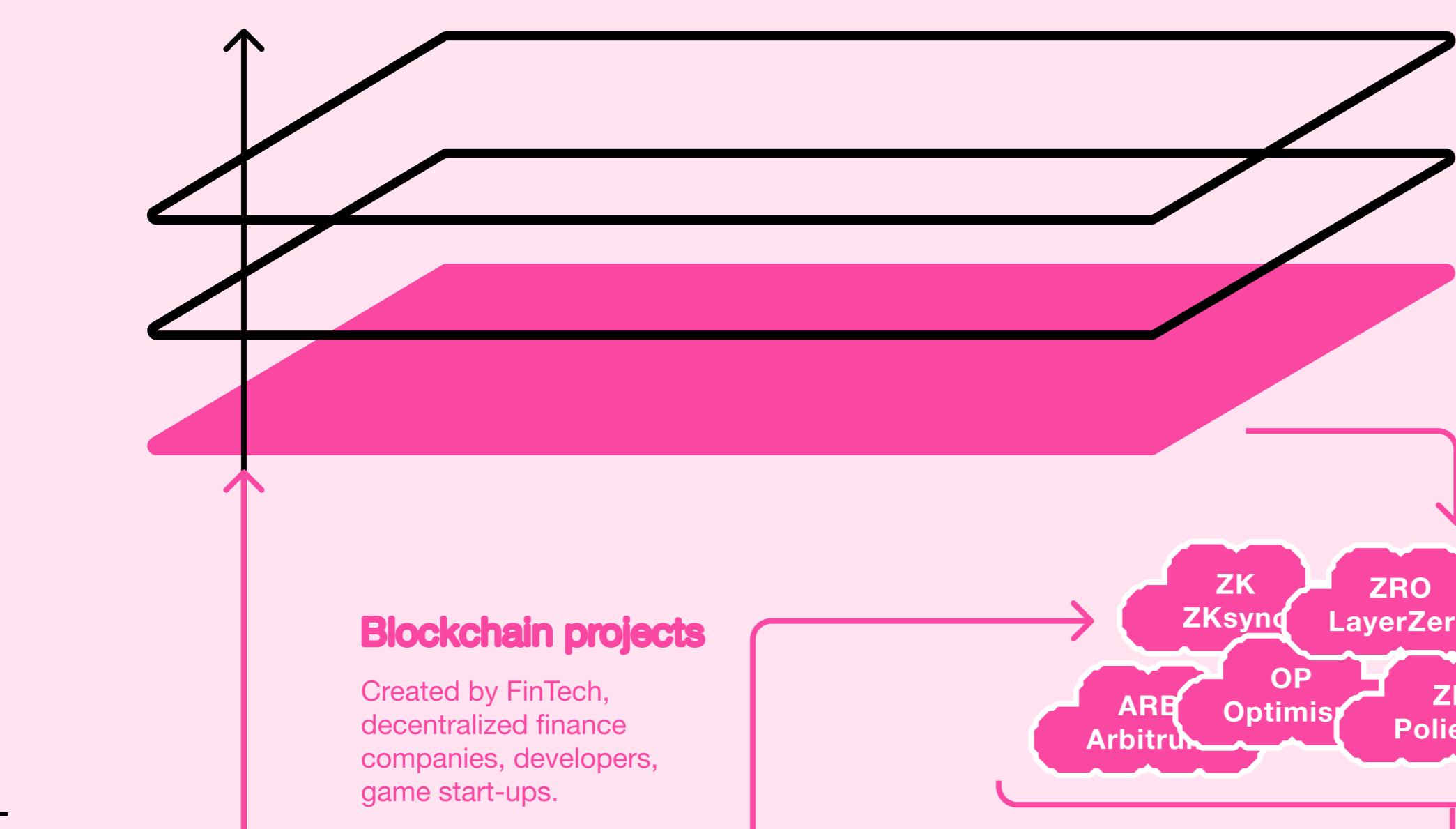
Brazil, South Africa, Kenya, Indonesia
United Arab Emirates

Sources: Global state of crypto (2022), Copilot, Gemini



WEB 3.0

Blockchains solutions



LAYER 0

LAYER 1

LAYER2

Digital wallets

Digital wallets allow users to communicate, receive and manage their digital assets, and are the foundation of any sort of communication with blockchain application.

WEB 2.0

Research question

How to map social media airdrop vernaculars with methods of query design?

Project purpose

Explore blockchain vernaculars through wallets and social media

Sub-question

What query design methods are most effective for curating datasets about airdrop farming vernaculars across platforms?

Digital methods

L2 Airdrops based on DappRadar Ranking

Arbitrum, ARB | ZKSync, ZK | Optimism, OP
LayerZero, ZRO | Starknet, STRK | Polkedra, ZK
Celestia, TIA | Taiko, TKO

Searching query iterative process

Technical information about the blockchain projects and associated Crypto Airdrops

Navigational procedure with and about platforms

Search as research

Digital cultures

Communities of coin traders: their activities on social media contribute to the valuation of crypto-assets

Generational (Gen Z & Millennials) explains the significance of digital cultures.

Browser extensions

Wallets require the installation of browser extensions or mobile apps to conduct blockchain transactions, they have a unique public address and are secured by private keys and seed phrases.

Discord
Closed communities

Reddit
Rational-argumentative

Youtube
Influencers

Telegram
Promotional groups

Twitter
Between hype and critical engagement

How to read this poster

This is a poster that reconstructs the process of collecting data about blockchain Airdrops, a social and cultural phenomenon that happens on social media platforms and private digital wallets.

Items in black serve as background knowledge and context.

Items in pink are objects of inquiry explored during Week 1 of the Summer School.

Items in green are results and datasets that will be analyzed on Week 2 of the Summer School.

Youtube

SEARCH QUERIES CATEGORIES

Airdrop itself, Reward, Distribution

Eligibility criteria

Airdrop farmers & sybil attacks

TESTING QUERIES

An example of testing a query:

Airdrop itself → "The genesis drop"

↓

"Celestia airdrop"

↓

Irrelevant videos

Relevant videos

Video lists datasets curated with YouTube Data Tools

Telegram

Listing groups and channels with GPTs search engine for Telegram

QUERY

Telegram API

zksync airdrop

Teletag GPT Search Engine

the airdrop official channels, bots for airdrop farming, airdrop news channels

OUTPUT

73 groups

206 groups

Datasets curated with TeleCatch

Twitter (X)

List of blockchain projects' official tweets announcing the airdrop release

QUERY

@arbitrum @TheZKNation
@optimismgov @optimism
@starknetfdn @polyhedrakz
@celestiaorg @taikoxyz

Replies scraped from announcement tweets

Comments scraped with Instant Data Scraper

Week 1 Team DMI

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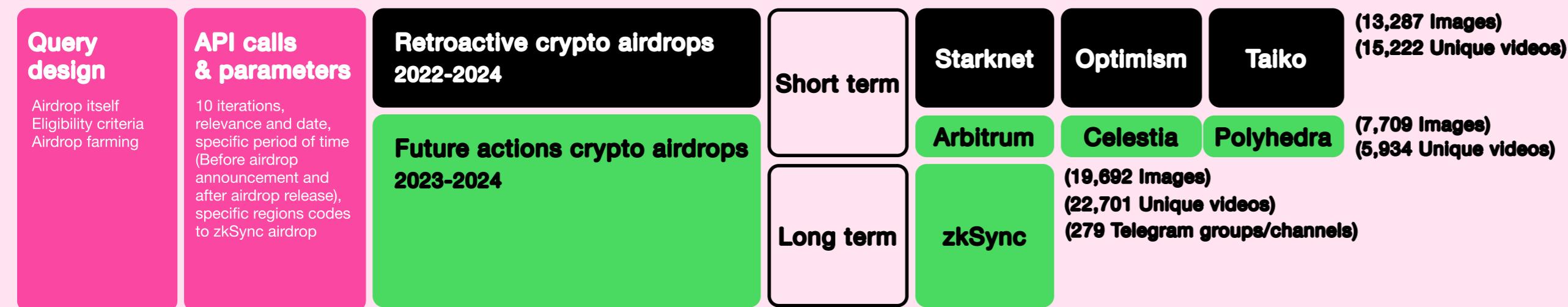
Digital Methods Initiative
Summer School 2024
Week 1 - Week 2

Digital methods for Blockchain Research^{2/3}

Mapping crypto airdrop vernaculars on youtube and telegram

Crypto airdrops are reward schemes that involve sending tokens to web3 wallet addresses in exchange for building a long-term loyal community that will "generate genuine economic activity" (Messias, Yaish & Livshits, 2023). Historically, airdrops have emerged as a new method for crypto projects to gain social and financial traction, differing from the get-rich-quick schemes of Initial Coin Offerings (ICOs) prevalent in 2016-2018. This project investigates seven crypto airdrops characterized by the demand for retroactive and future actions from blockchain users in exchange for receiving tokens. By examining their reward practices through the perspectives of YouTube and Telegram content creators, user engagement, and visual content production, we mapped YouTube and Telegram airdrop vernaculars using qualitative and quantitative methods with temporal datasets.

Dataset building



Week 2

Team

DMI

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Andrea Benedetti
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Findings: Quali-Quanti Visual Methods

Finding: Retroactive airdrops

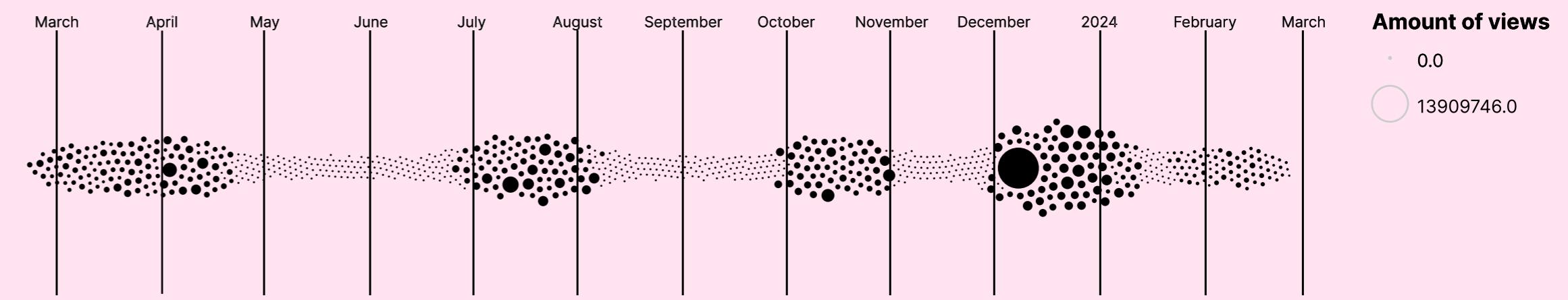
YouTube Video Content Characteristics

- The themes of the retroactive airdrops focus on eligibility and claiming guides.
- The engagement peaks align with airdrop announcements and releases and it lasts ~10 days.
- The number of videos uploaded was 15,222 videos.

Channel Characteristics

- There are about 5000 unique creators active on YouTube over time.
- There are 3 creators who lead in uploads and engagement.
- The channels are primarily crypto-related, not just airdrops.

Youtube total number of views for retroactive airdrops overtime



Finding: Short-term future airdrop

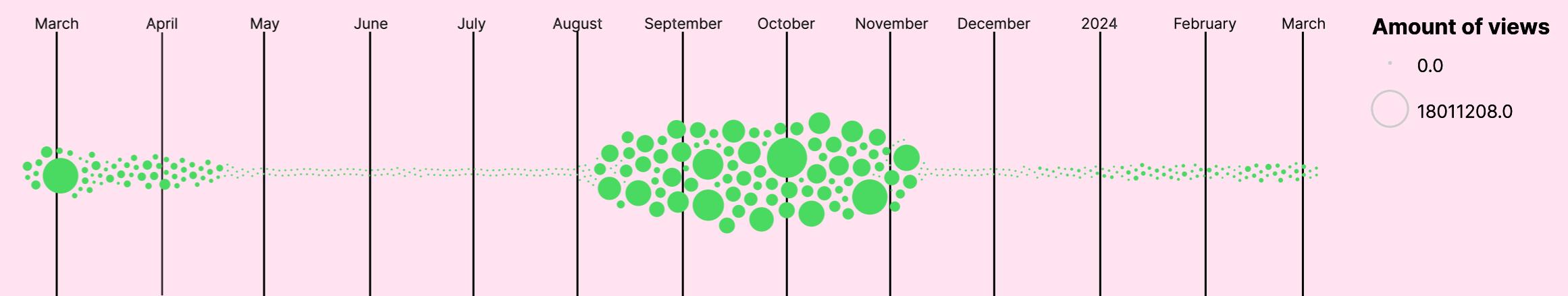
YouTube Video Content Characteristics

- The themes of the short-term airdrops focus on eligibility and claiming guides.
- The engagement peaks align with airdrop announcements and releases and it lasts ~3 days.
- The number of videos uploaded was 5,934 videos.

Channel Characteristics

- There are about 5000 unique creators active on YouTube overtime.
- There are 10 creators who lead in uploads and engagement.
- The channels are primarily crypto-related, not just airdrops.

Youtube total number of views for future short-term airdrops overtime



Images analysis

Finding: Image analysis

- Unique Aesthetics:** YouTube content creators tend to use a mix of real people and artificial backgrounds.
- Money Focus:** Creators attract viewers with symbols like dollar signs, gold coins, and "get rich quick" phrases; they will also emphasise low barriers to entry such as free access.

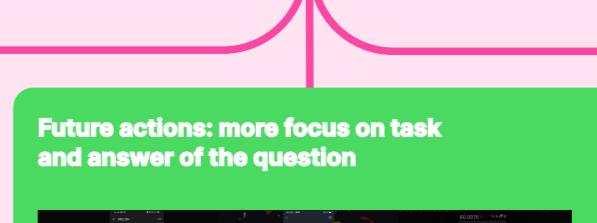
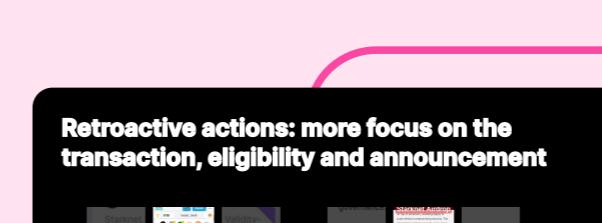
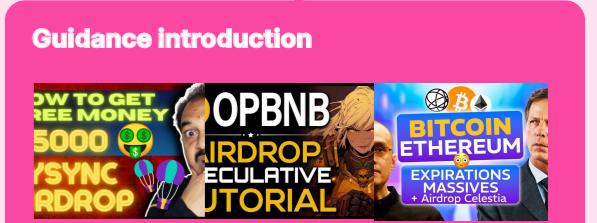
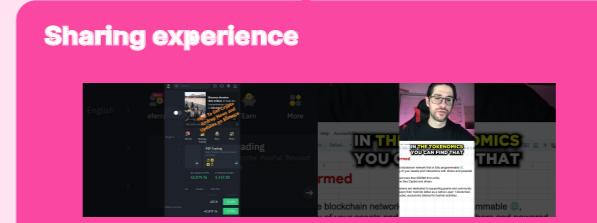
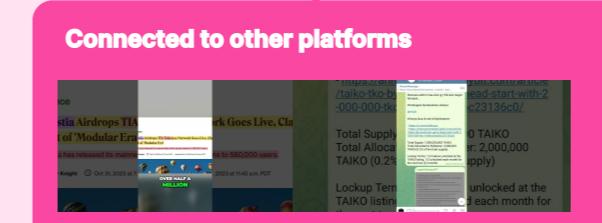
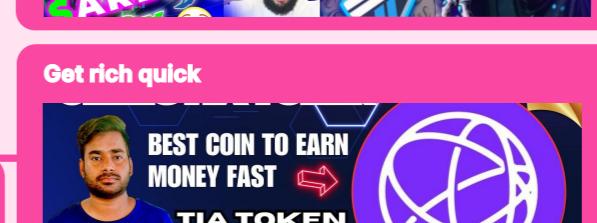
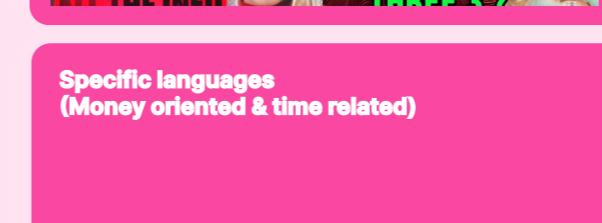
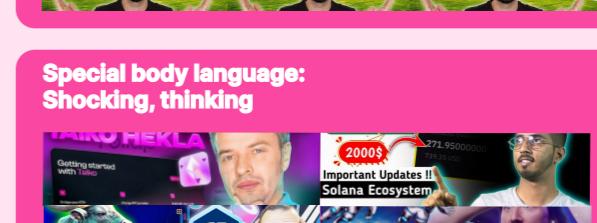
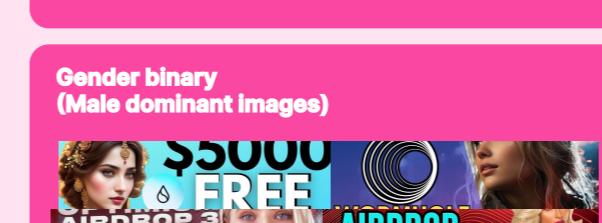
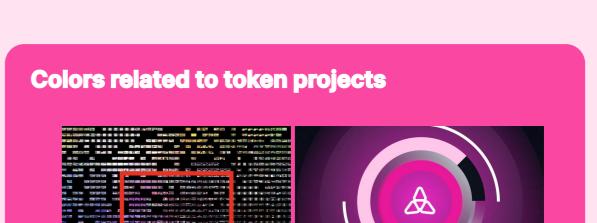
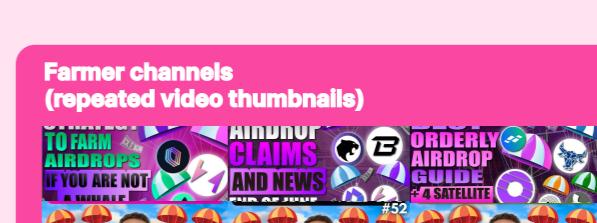
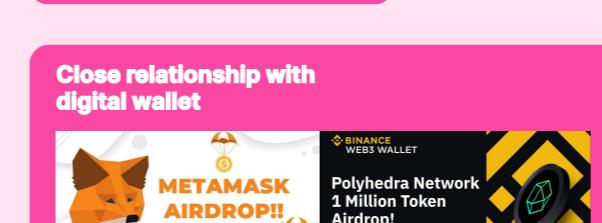
- Decentralized and Sharing Community:** No single channel dominates. Creators share operational knowledge step-by-step, promoting collaboration.

- Male-Dominated Imagery:** Covers feature more male figures, with many AI-generated young, beautiful women.

- Time Emphasis:** Creators use words like "soon" or "now" to create urgency.

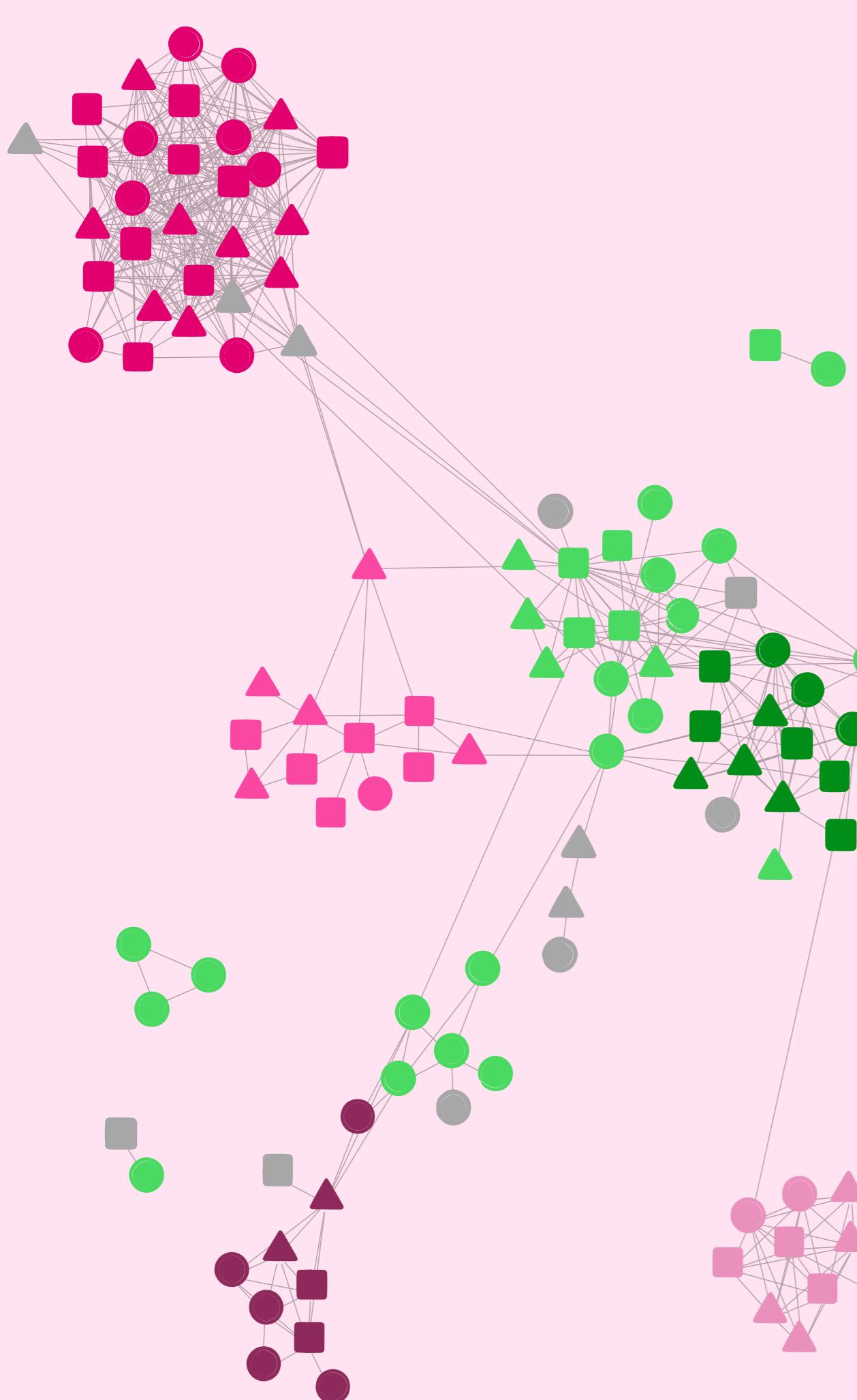
YouTube Airdrop Visual Vernacular

Image composition



Country of search	Language of video
Kenya	Chinese
Brazil	Vietnamese
South Africa	Turkish
	English
	Spanish
	Portuguese
	Other

Video co-commenting network



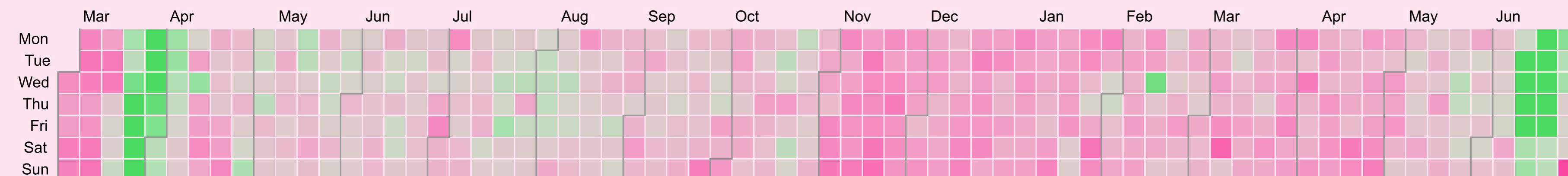
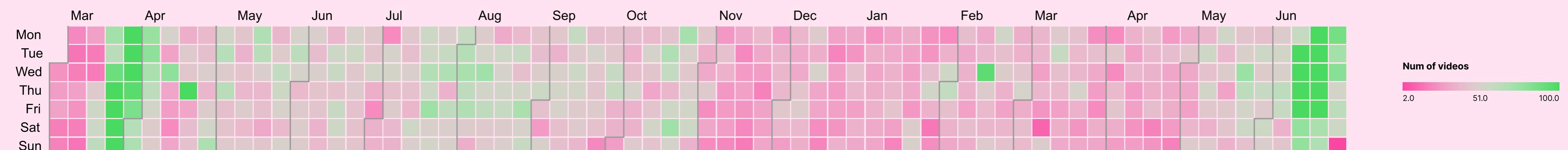
Video Co-commenting Network for unique videos searched for region codes of Brazil, Kenya and South Africa.

Videos were coupled mainly by language with videos in Russian situated in the middle of the graph. The formed graph is a giant component and the main finding are that some Russian videos were concerned with scans or were skeptical about the airdrop while the videos in Portuguese were more optimistic.

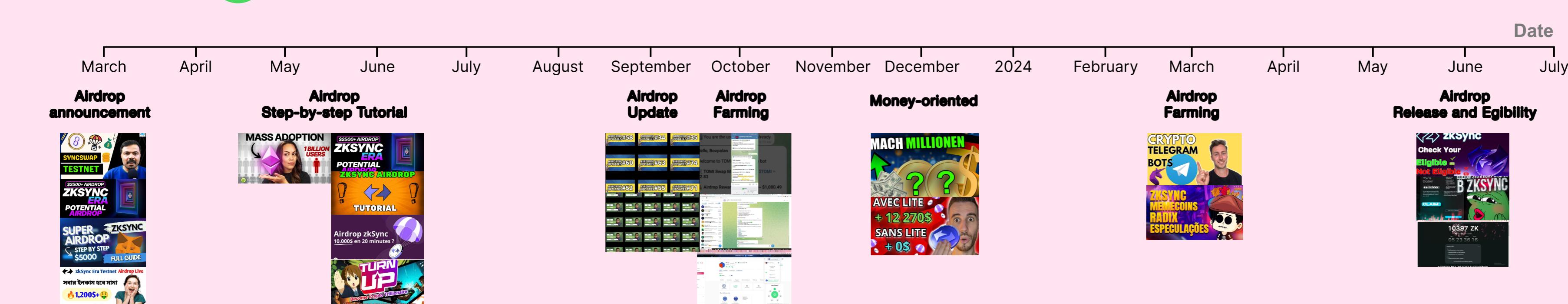
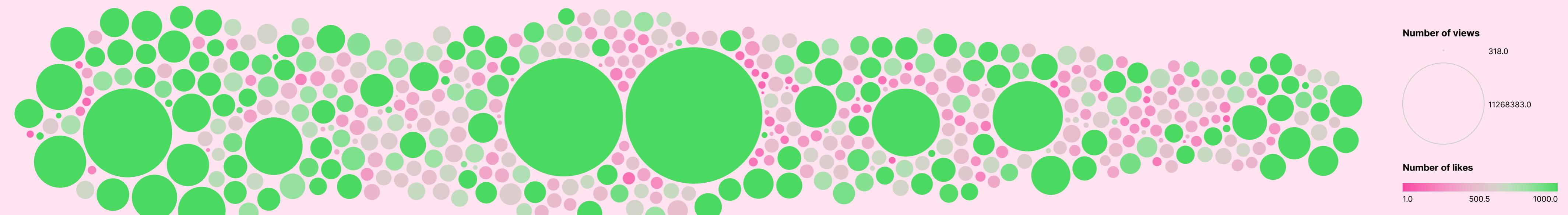
ZKsync Airdrop Unchained with quali-quant visual methods 3/3

ZKsync airdrop on 22,701 Youtube unique videos

Comparison between number of creators and videos over time 2023-2024

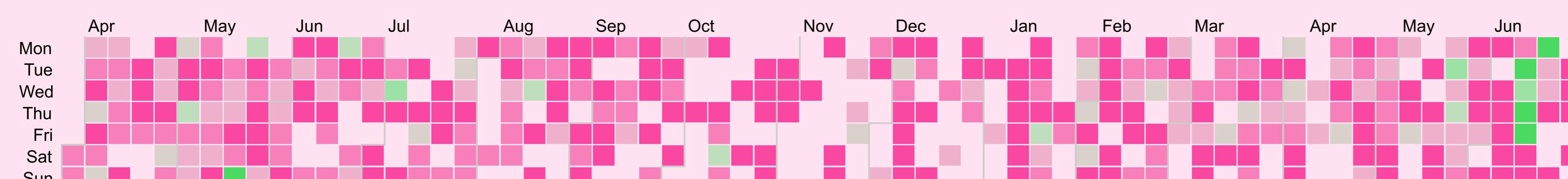
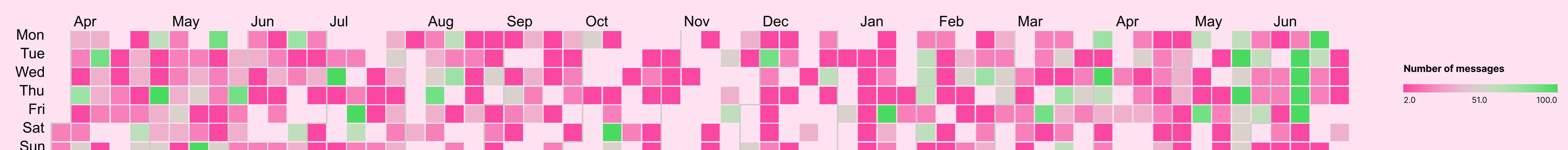


Number of views and like per day overtime

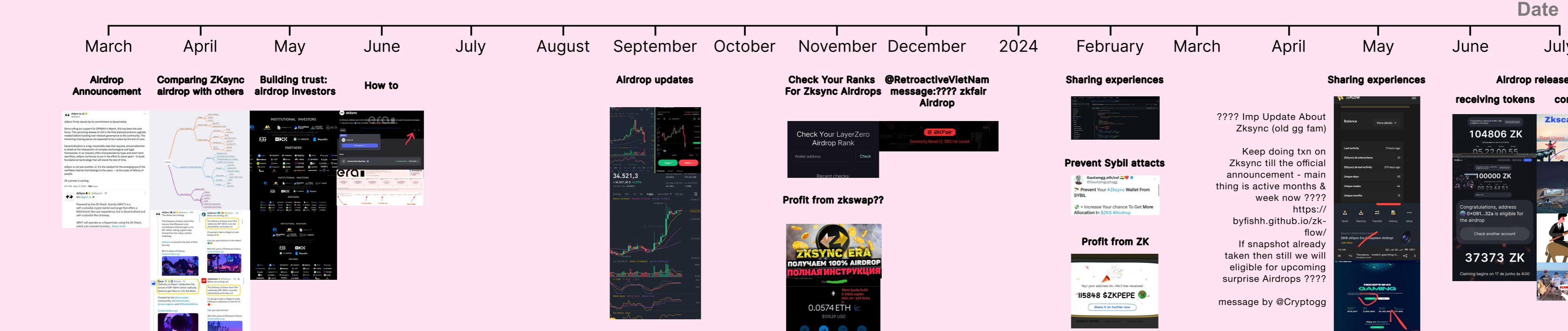
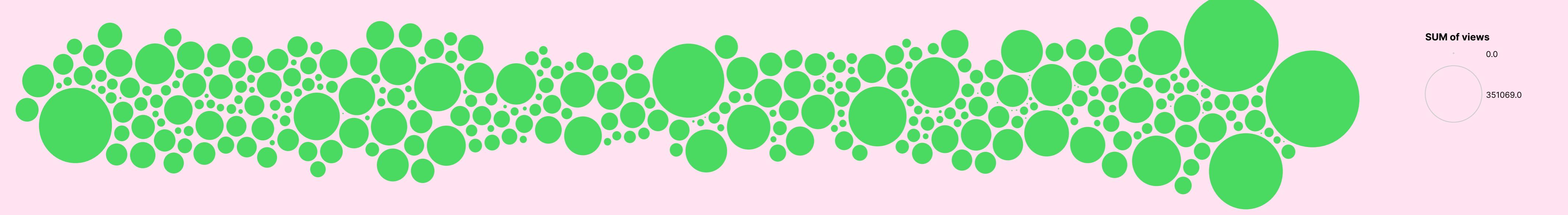


ZKsync airdrop on 279 Telegram groups/channels

Comparison between number of messages and unique users over time 2023-2024



Number of views per day overtime



Findings

Finding: Long-term (ZKeync) YouTube Content and Channel Characteristics

- The themes of the video content for long-term airdrop (ZKeync) focus on eligibility and claiming guides.
- The engagement peaks align with airdrop announcements and releases and the peaks last ~10 days.
- There were 22,701 unique uploaded videos.
- There were ~5000 unique creators with 10 creators leading in uploads and engagement.
- The channels are primarily crypto-related, not just airdrops.

Long-term (ZKeync) Telegram Content Characteristics

- The peaks of views on Telegram align with airdrop announcements and releases.
- The number of messages increases with the same trend as the number of authors.
- The content of the message is about the accusation of airdrop scam.

Finding: Long-term (ZKSync) YouTube Thumbnails Differences

- Increase in Telegram Bot Advertising: Telegram bot advertising content has increased, possibly due to zkSync's long-term announcement period.
- Cross-Platform Communication: Compared to short-term airdrops, there is more content related to other social media platforms, indicating more frequent cross-platform communication.

Finding: Long-term (ZKSync) Telegram Images Characteristics

- Screenshots Predominate: Most Telegram group images are screenshots highlighting key details like token allocations, airdrop instructions, and eligibility timetables.
- Professional and Technical: Discussions are professional and technical, featuring code reviews and detailed analyses.
- Sharing Culture: Members share experiences and tutorials step-by-step.
- Close-Knit Community and MEME Culture: In close-knit groups, members express negative views more freely and use MEMEs extensively.

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