



# Observation of Information Manipulations on EU Parliament Elections

Table of Contents

<b>Glossary</b> .....	4
<b>Executive Summary</b> .....	6
<b>Introduction</b> .....	7
<b>Methodology</b> .....	7
<b>Building Similarity Nodes Between User Accounts</b> .....	8
<b>User Feature Construction</b> .....	8
<b>User Behaviour Features</b> .....	8
<b>Co-occurrence Features</b> .....	9
<b>User Clustering</b> .....	9
<b>User Similarity Evaluation</b> .....	9
<b>User Clustering</b> .....	9
<b>Group Analysis</b> .....	9
<b>Opinion Clustering</b> .....	9
<b>Stance Detection and Narrative Summary</b> .....	10
<b>Data Coverage</b> .....	10
<b>Timeline</b> .....	10
Troll Narratives on the Far-Right Takeover of Europe Is Underway Event.....	12
Troll Narratives on the At Least 120,000 Gather in Berlin for Latest Round of Protests Against Far-Right Event.....	13
Troll Narratives on the European powers warn of spike in Russian propaganda before EU elections Event.....	14
Troll Narratives on the EU adopts measures soon to curb election risks on X, TikTok, Facebook Event.....	15
<b>Non-election EU topics</b> .....	15
<b>Main Troll Groups</b> .....	16
<b>Troll Group: Twitter#6630</b> .....	16
<b>Abnormal Behaviors</b> .....	17
<b>Operated Stories</b> .....	17
<b>Targets of Troll Activities</b> .....	19
<b>Troll Group: YouTube #253</b> .....	19
<b>Abnormal Behaviors</b> .....	19
<b>Operated Stories</b> .....	20
<b>Targets of Troll Activities</b> .....	22
<b>DISARM Techniques Used by Troll Groups</b> .....	22
<b>The Infodemic Platform</b> .....	23
<b>Table of Contents</b> .....	1

## Glossary

Term	Explanation
<b>Troll Account</b>	Taiwan AI Labs employs large language models to analyze accounts on social media platforms, identifying accounts that frequently comment on the same posts together, indicating coordinated behavior. These accounts exhibit long-term similarities in their commenting patterns, suggesting they are not controlled by natural persons but are likely automated or manipulated, thus termed “Troll Accounts.”
<b>Troll Group</b>	When Troll Accounts show long-term similarities in commenting patterns and signals, they are grouped into a “Troll Group.” These groups can be analyzed for the events they participate in and the targets they manipulate, providing insights into the political forces they may serve.
<b>Event</b>	When an event occurs, it generates extensive news coverage and social media discussions, including posts and videos. Taiwan AI Labs uses large language models to organize these reactions into an “Event,” facilitating the observation of social media manipulation related to the event.
<b>Story</b>	Events can develop over time, linking many related events into a continuous narrative. Through classification with large language models, these interconnected events can be organized into a “Story,” summarizing the coordinated manipulation and related news across a prolonged period for each story, allowing for the observation of long-term collaborative operations.
<b>Media Volume</b>	Media Volume refers to the amount of media presence, calculated by the number of news reports.
<b>(PRC) State-affiliated Media</b>	(PRC) State-affiliated Media denotes media outlets whose content is controlled or censored by the government of the People's Republic of China.
<b>Community Volume</b>	Community Volume represents the volume on social media platforms, encompassing the total number of comments observed from both troll accounts and regular accounts.
<b>Troll Volume</b>	Troll Volume pertains to the volume of comments made by troll accounts.
<b>User Behavior Features</b>	Analysis of social media data reveals a series of columns that represent user behavior features, such as the ‘destination of user interactions’ (post_id or video_id), the ‘time of user actions’, and the ‘domain of shared links by users’, among others. These data are subsequently utilized for user clustering.
<b>Co-occurrence Features</b>	Co-occurrence features aim to identify users who frequently engage with the same topics or respond to the same articles, appearing together in the same context to create a fabricated volume, a common characteristic of troll accounts. Through this method, we can identify troll accounts and cluster them into troll groups.
<b>User Clustering</b>	Taiwan AI Labs analyzes the relationship between pairs of accounts based on a series of signals and assigns a score. If the score exceeds a certain threshold, a connection is established. If multiple accounts are connected, they are clustered into a troll group.

<b>Group Analysis</b>	Taiwan AI Labs uses Taiwan LLM, a large language model pre-trained in Taiwanese dialects, to classify the comments and opinions of troll groups, identifying their main narratives and analyzing the primary information manipulated by troll groups and their underlying intentions.
<b>Topic Engagement</b>	Taiwan AI Labs employs large language models to analyze community platform posts and comments related to news, identifying traces of message manipulation by troll groups. This clarifies which topics troll groups participate in and manipulate discussions on.
<b>Operation Methods</b>	Taiwan AI Labs utilizes the DISARM Framework to analyze the methods and intentions behind the information operations conducted by troll groups.
<b>Leverage Existing Narratives</b>	Use or adapt existing narrative themes, where narratives are the baseline stories of a target audience. Narratives form the bedrock of our worldviews. New information is understood through a process firmly grounded in this bedrock. If new information is not consistent with the prevailing narratives of an audience, it will be ignored. Effective campaigns will frame their misinformation in the context of these narratives. Highly effective campaigns will make extensive use of audience-appropriate archetypes and meta-narratives throughout their content creation and amplification practices.
<b>Reframe Context</b>	Reframing context refers to removing an event from its surrounding context to distort its intended meaning. Rather than deny that an event occurred, reframing context frames an event in a manner that may lead the target audience to draw a different conclusion about its intentions.
<b>Flooding the Information Space</b>	Flooding and/or mobbing social media channels feeds and/or hashtags with excessive volume of content to control/shape online conversations and/or drown out opposing points of view. Bots and/or patriotic trolls are effective tools to achieve this effect.
<b>Trolls Amplify and Manipulate</b>	Use trolls to amplify narratives and/or manipulate narratives. Fake profiles/sock puppets operating to support individuals/narratives from the entire political spectrum (left/right binary). Operating with increased emphasis on promoting local content and promoting real Twitter users generating their own, often divisive political content, as it's easier to amplify existing content than create new/original content. Trolls operate wherever there's a socially divisive issue (issues that can/are to be politicized).
<b>Comment or Reply on Content</b>	Delivering content by replying or commenting via owned media (assets that the operator controls).
<b>Manipulate Platform Algorithm</b>	Manipulating a platform algorithm refers to conducting activity on a platform in a way that intentionally targets its underlying algorithm. After analyzing a platform's algorithm (see: Select Platforms), an influence operation may use a platform in a way that increases its content exposure, avoids content removal, or otherwise benefits the operation's strategy. For example, an influence operation may use bots to amplify its posts so that the platform's algorithm recognizes engagement with operation content and further promotes the content on user timelines.

## Executive Summary

From the start of the year until early April 2024, detailed analysis has revealed the engagement of 16,902 troll accounts in related discussions, making up 12.10% of the total conversation. Media analysis during this period also detected 1,365 instances of media engagement, with 4.84% of these instances (66 mentions) linked to state-affiliated media from China and Russia.

In the lead-up to the European Parliament elections, the digital discourse is heavily influenced by orchestrated campaigns from troll groups, highlighting two primary developments: the purported rise of far-right movements within Europe and initiatives to counteract interference on social media by Russia, large tech firms, and other external actors. These troll-driven narratives foster a deliberate skepticism towards the threat of extremism and promote a robust endorsement of conservative ideologies, skewing public perception. Moreover, they amplify concerns over government censorship, question the integrity of mainstream media, and feed disillusionment with traditional outlets' handling of topics like Russian propaganda, thereby sowing a deeper mistrust in the media as fair conveyors of information. The impending rollout of EU regulations aimed at curbing disinformation on platforms such as X, TikTok, and Facebook is presented by these trolls as a contentious issue, complicating efforts to balance election security with the maintenance of free speech rights.

Troll groups' narratives, reflecting those in Russian and Chinese state-affiliated media, span a wide array of concerns impacting Europe, with a special focus on the continent's declining living standards and extending to topics beyond the immediate scope of the European Parliament elections. These narratives delve into issues like Russia's War in Ukraine, energy security, digital regulation, migration, and climate change, showcasing a thematic coherence that transcends borders and highlights key geopolitical and socio-economic challenges. This alignment underscores a concerted effort to shape public discourse around critical issues affecting Europe, revealing a strategic intersection of interests among troll groups and state media from Russia and China, particularly on matters such as energy security and geopolitical conflicts.

The narrative landscape of online trolling has been significantly influenced by two predominant troll groups, each advocating distinct agendas on platforms, Twitter and YouTube. On Twitter, one group has launched intense criticism against Joe Biden, scrutinizing his mental health and policy decisions, and has targeted Canadian Prime Minister Trudeau with accusations of economic mismanagement and media bias, casting Canada unfavorably. Conversely, on YouTube, the narrative pushed by another troll group expresses dissatisfaction with financial assistance to Ukraine, levels criticism at NATO for intensifying conflicts, and challenges U.S. foreign policy—particularly its support for Israel—advocating for President Biden to adopt a stance more sympathetic to Palestine.

As this intricate web of disinformation unfolds, similar strategies observed in the recent Taiwan presidential election and the TikTok banning event in the U.S. shed further light on the pervasive tactics employed. In both instances, narratives around the regulation of social media platforms echo those seen in the EU, with troll groups vocally championing 'freedom of speech' as a principal argument against regulation. Furthermore, when the discourse veers towards the rise of far-right ideologies, these groups skillfully divert the conversation by asserting that the EU should prioritize resolving other more critical issues. This tactic of distraction aligns with their broader strategy of undermining focused discussions on pressing matters. Additionally, a recurring pattern emerges where media outlets that highlight misinformation become targets themselves, accused of bias or incompetence. This tactic not only

challenges the credibility of the media but also attempts to dilute the severity of misinformation issues, reflecting a sophisticated approach to disrupting coherent public discourse on a global scale.

As the European Union navigates through this critical period marked by geopolitical shifts, internal challenges, and external manipulations, the role of digital platforms in shaping political narratives becomes increasingly evident. The orchestrated activities of troll groups, coupled with the strategic dissemination of narratives that echo state-affiliated media from adversarial nations, highlight a complex web of influence aimed at destabilizing public discourse and swaying electoral outcomes. This environment, ripe with disinformation and polarized ideologies, underscores the urgent need for robust mechanisms to safeguard the integrity of the democratic process. As EU citizens approach a pivotal election, setting up the AI-powered mechanism with trustworthy partners in order to establish the collective resilience of the European community against disruptions will be crucial in steering the continent towards a future that reflects its democratic values and principles, ensuring that the voice of the electorate prevails amidst the cacophony of digital warfare.

## Introduction

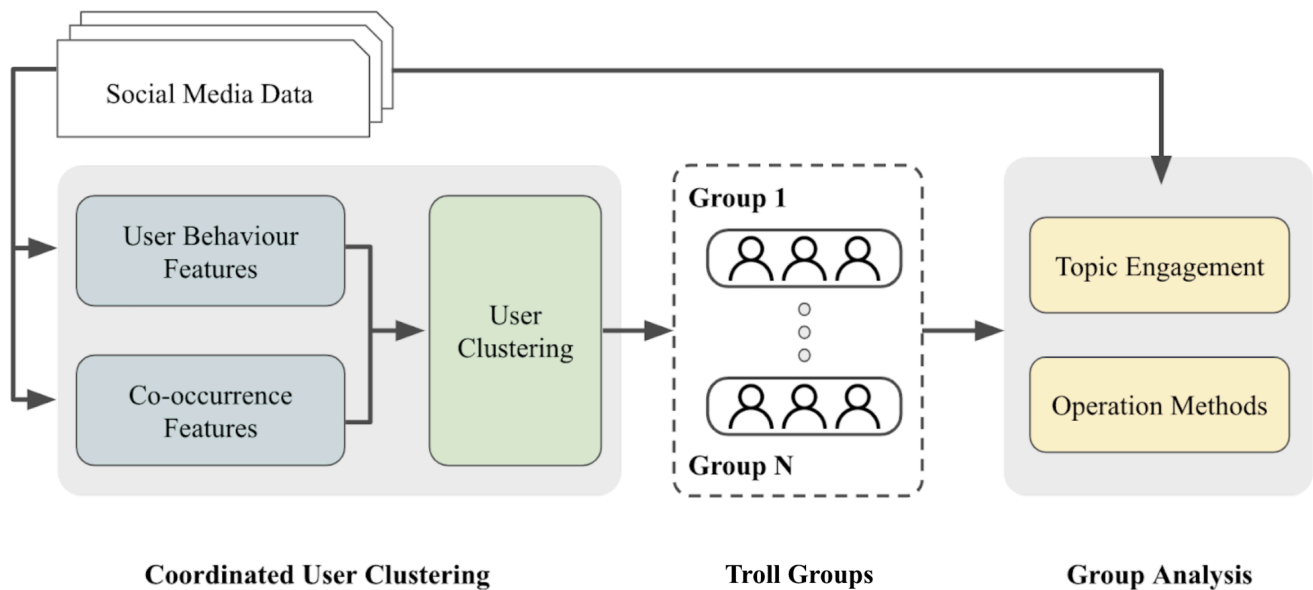
As the European Union approaches the June 2024 European Parliament elections, it faces a complex and rapidly changing global environment. These elections come in the wake of significant global events, including the ongoing conflict in Ukraine, the aftermath of the COVID-19 pandemic, the completion of Brexit, and the anticipation of the upcoming U.S. presidential election, potentially featuring Donald Trump as a candidate. The political landscape within the EU is experiencing a noticeable shift toward right-wing ideologies, challenging traditional political factions and signaling a possible reconfiguration of power in Brussels. The upcoming elections are poised to be a pivotal moment, potentially altering the EU's strategic direction as the new Commission may chart a different course. While the existing European Commission has introduced significant legislative measures, the forthcoming Commission is poised to chart a novel course, possibly altering the EU's strategic direction.

## Methodology

Taiwan AI Labs utilizes our analytic tool "Infodemic" to conduct investigations into information operations across various social media platforms.



## Building Similarity Nodes Between User Accounts



Graph 1: An overview of the coordinated behavior analysis pipeline

Graph 1 illustrates the analysis pipeline of this report, consisting of three components:

- **User Feature Extraction:** We evaluate and quantify the behavioral traits of users, converting these characteristics into user vectors for further analysis.
- **User Clustering:** Using these user vectors, we create a network of users with similar patterns and employ a community detection algorithm to pinpoint groups of users with high correlations, classifying them as collaborative units for additional scrutiny.
- **Group Analysis:** We explore the tactics and strategies of these collaborative units, focusing on their choice of subjects, methods of operation, and their inclination to either support or challenge certain entities.

### User Feature Extraction

To capture user information on social forums effectively, we propose two feature sets:

#### User Behaviour Features

Preparing data to highlight user behavior features is essential for deriving significant insights from the dataset, which includes a vast array of details pertaining to social media posts (or videos) and user interactions. We gathered a wide variety of raw social media data, subsequently converting it into a structured format with columns that depict various aspects of user behavior. This includes elements like the 'destination of user interactions' (indicated by `post_id` or `video_id`), the 'timing of user actions', and the 'domains of links shared by users', among others. These user behavior features will undergo further transformation and structuring to facilitate their use in assessing user similarity and for clustering purposes.

## Co-occurrence Features

Co-occurrence features aim to pinpoint users who often interact with similar topics or engage with identical articles. To quantify these features among users, we utilize Non-Negative Matrix Factorization (NMF), a mathematical method applied in data analysis and for reducing dimensionality. This technique decomposes a given matrix into two or more matrices, ensuring all elements within these matrices are non-negative.

## User Clustering

### User Similarity Evaluation

After establishing user features, we move to examine the coordinated relationships among users. For behavioral features, we conduct comparisons of various behaviors between pairs of users and scale the results to a range from 0 to 1. For example, regarding the timing of user activities, we document the hours of activity for each user over a week in a 7x24-dimensional matrix. Subsequently, we calculate the cosine similarity between user pairs based on their activity timing matrices.

In terms of co-occurrence features, cosine similarity is also employed to gauge the resemblance between users' co-occurring vectors. This involves calculating the cosine of the angle between these vectors to determine the degree of similarity in users' responses or actions. This method proves particularly effective in social media studies, enabling the grouping of users by shared behavioral patterns. Users exhibiting high cosine similarity are indicative of a closely coordinated behavior pattern, revealing clusters of users with similar interests or engagement habits.

### User Clustering

Once we've calculated pairwise similarities among users from their individual features, we proceed to connect user pairs that exhibit a similarity beyond a set threshold by establishing an edge between them, thus forming a user network. Following the creation of this network, we employ the Infomap algorithm to cluster it. Infomap is a community detection algorithm that identifies structures within networks based on the flow of information. Communities discovered within this network are subsequently classified as troll groups for further analysis in subsequent sections. This method allows us to systematically identify and categorize groups of users exhibiting coordinated behavior patterns, which are indicative of troll activity.

## Group Analysis

### Opinion Clustering

To effectively decipher the narratives put forth by each user group, we utilized a text clustering approach on the comments made by troll groups. By leveraging a pre-trained text encoder, we transformed each comment into vector form. We then employed a hierarchical clustering algorithm to organize similar posts into cohesive groups. These clustered groups of posts will be analyzed further in subsequent discussions, providing a structured framework to examine and understand the narratives and themes prevalent within troll group communications.



## Stance Detection and Narrative Summary

Large Pretrained Language Models have showcased their effectiveness in identifying entities within textual content and providing insightful explanations about them. This functionality aids in grasping the key components of discourse, especially in analyzing the influence of comments and evaluations on these recognized entities.

In our analysis, we utilize Taiwan LLM for text examinations. Taiwan LLM is a substantial language model that has been pre-trained on a corpus predominantly in the native Taiwanese language. It has demonstrated exceptional ability in understanding Traditional Chinese and is particularly adept at identifying and interpreting topics and entities related to Taiwan. Specifically, we employ Taiwan LLM to discern essential topics, entities, and names of organizations mentioned in each comment. Additionally, it evaluates the comment author's perspective towards these entities, classifying their sentiment as positive, neutral, or negative. This method is systematically applied across all clusters of opinions.

Ultimately, we aim to calculate the proportion of each primary topic or entity mentioned within the opinion groups, alongside the percentage of positive or negative sentiment linked with each. Moreover, we generate summaries for each opinion cluster using the language model, which assists data analysts in quickly comprehending the broad overview of the event and the prevailing sentiments within the discourse.

## Data Coverage

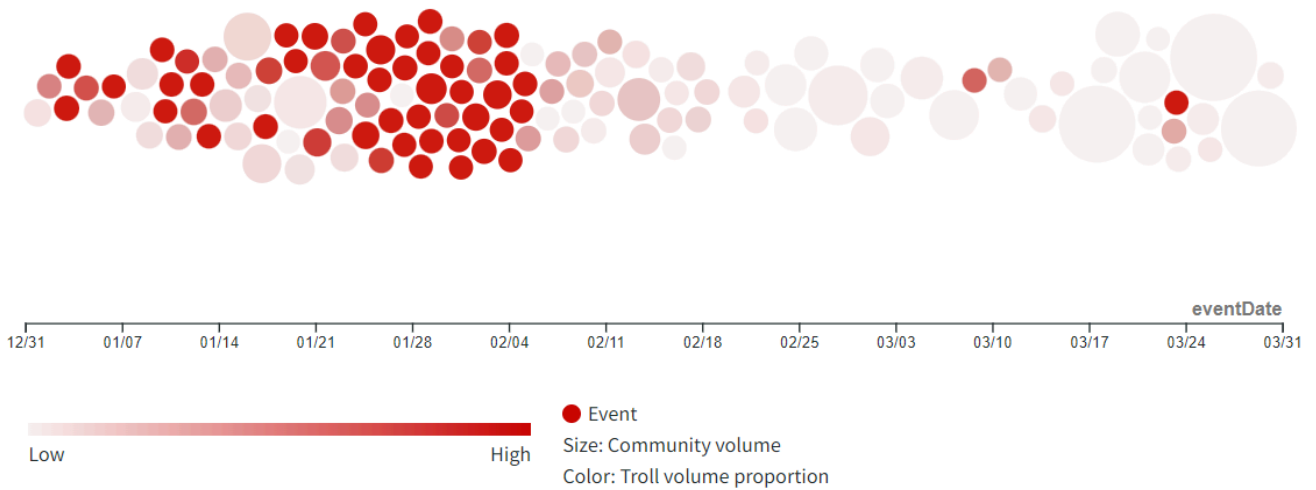
The study examined data from January 1, 2024, to April 1, 2024, during which 130 events were observed and 1,365 instances of media engagement were tracked. Of these, 4.84% were associated with media volumes from China and Russia. Analysis revealed that 16,902 troll accounts were active in online discussions across various social media platforms. From the total discussion volume of 244,352, 12.10% were traced back to these troll accounts.

Events	Media Volume	(PRC) State-affiliated Media (%)	Troll Accounts	Community Volume	Troll Volume (%)
130	1,365	66 (4.84%)	16,902	244,352	29,569 (12.10%)

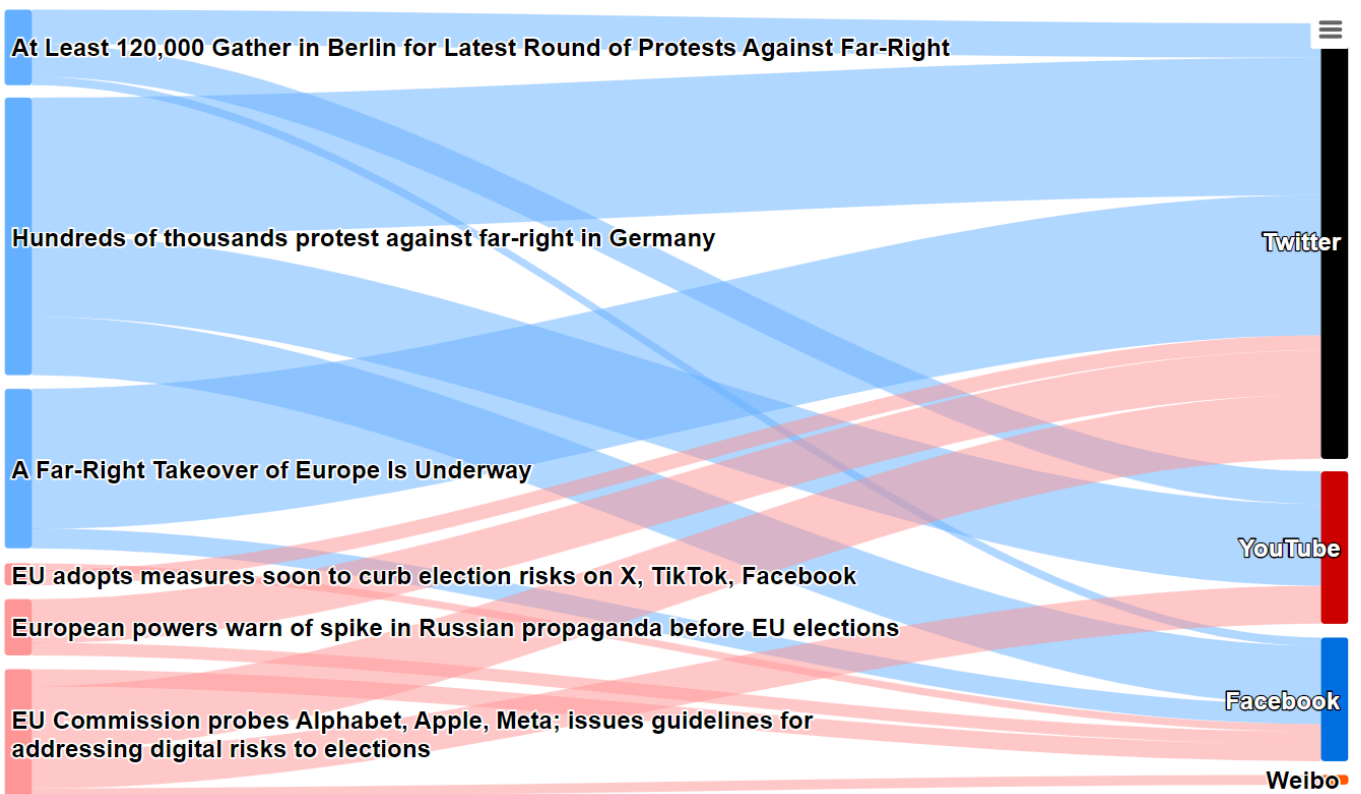
Table 1: Analyzed data quantity during the period of the EU Parliament Elections event (from <https://infodemic.cc>)

## Timeline

The events analyzed by the Infodemic platform are presented in a BeeSwarm Plot, as shown in Graph 2. The events analyzed include protests by at least 120,000 people in Berlin and hundreds of thousands throughout Germany against the far-right, amid concerns over a far-right takeover of Europe. Additionally, the EU is taking action by implementing measures to mitigate election risks on platforms like X, TikTok, and Facebook, and issuing warnings about a spike in Russian propaganda before the EU elections. Furthermore, the EU Commission is conducting investigations into companies such as Alphabet, Apple, and Meta, and establishing guidelines to manage digital election risks.



\* Each circle represents an event related to this manipulated story  
 \*\* The size of each circle defined by the sum of the social discussion of that event  
 \*\*\* The darker the circle is, the higher the proportion of troll comments in the event  
 Graph 2: Event overview by timeline (from <https://infodemic.cc>)



Graph 3: Sankey diagram illustrating the distribution of troll activity across various events to social media platforms. (from <https://infodemic.cc>)

## Troll Narratives on the Far-Right Takeover of Europe Is Underway Event

Discussions about a potential far-right takeover of Europe are heavily influenced by troll commentary. Many participants question and ridicule the focus on threats from far-right groups, suggesting that other concerns should be prioritized (12.18%). This sentiment is echoed by Russia's state media, with TASS quoting Viktor Medvedchuk, who believes "Europe is on the path to poverty and destruction, which Zelensky's Ukraine trampled long ago," and RT noting a decline in trust within a NATO member state's government. Furthermore, discussions also draw attention to the perceived threats from far-left groups (2.81%) and frequently express staunch support for the Conservative Party (1.92%).


Percentage	Narratives
12.18% 	Comments question and mock the focus on the threat posed by far-right groups in Europe, suggesting other concerns should take precedence.
2.81%	The comments address the overlooked issue of far-left groups posing a threat within the country.
1.92%	Social media comments show repetition and emphasis on the Conservative Party. Users seem fervent and supportive.

Table 2: Key narratives surrounding the Far-Right takeover of Europe underway event (from <https://infodemic.cc>)



Graph 4: Operational examples of troll groups' narratives. (from <https://infodemic.cc>)

## Troll Narratives on the “At Least 120,000 Gather in Berlin for Latest Round of Protests Against Far-Right” Event

During the protest in Berlin, where at least 120,000 people demonstrated against the far-right, troll discussions centered on specific themes. Many comments suggest an alliance between Russian interests and Germany's left-wing factions, claiming that the demonstrations were solely composed of far-left participants (11.21%). There is also notable criticism of government censorship, declining living standards, and the state of media and democracy in Germany and Europe (2.48%). This criticism parallels the narrative from Russia's TASS, which discusses Europe's economic and social suffering due to a no-win war in Ukraine.


Percentage	Narratives
11.21%	Discussions around an alleged alliance between Russian interests and Germany's left-wing factions, along with assertions that recent demonstrations consist solely of far-left participants.
2.48% 	Criticism towards government censorship, decline of living standards and concerns over the state of media and democracy in Germany and Europe.

Table 3: Key Narratives Surrounding the Gathering of At Least 120,000 in Berlin for Latest Round of Protests Against Far-Right Event by Troll Groups (from <https://infodemic.cc>)



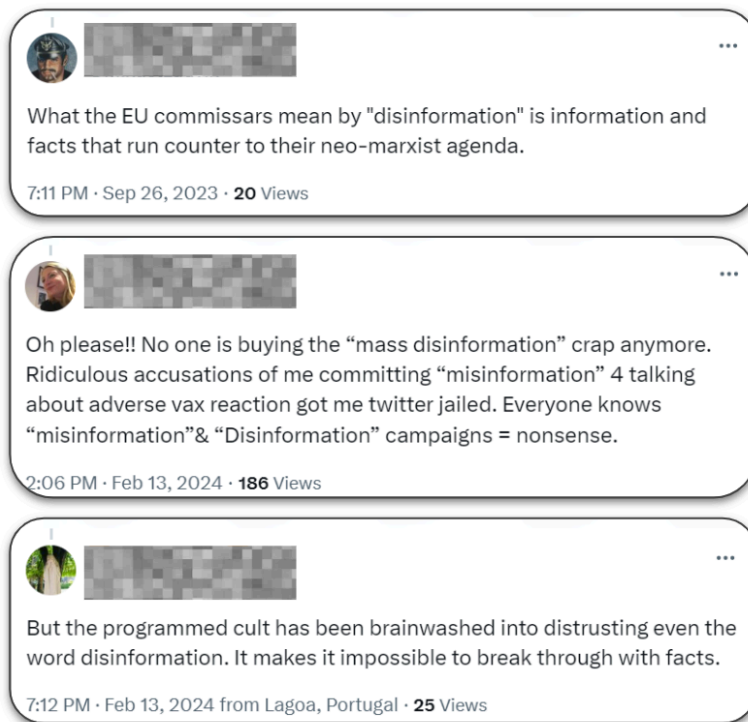
Graph 5: Operational examples of troll groups' narratives. (from <https://infodemic.cc>)

## Troll Narratives on the European powers warn of spike in Russian propaganda before EU elections Event

When European powers warned of a spike in Russian propaganda ahead of EU elections, the ensuing discussions reflected significant disillusionment. Many comments criticized the judgment of various media outlets and called for an end to their commentary (11.76%). Others dismissed the notion of widespread disinformation as baseless, labeling such accusations as nonsensical (2.94%).

Percentage	Narratives
11.76%	The comments reflect disillusionment with the positions taken by various media outlets on a particular topic, criticizing their discernment and suggesting they should stop their commentary.
2.94%	Comments dismiss the idea of mass disinformation. They believe accusations of spreading misinformation are baseless and that such campaigns are nonsensical.

Table 4: Key Narratives Surrounding the European Powers' Warning of a Spike in Russian Propaganda Before EU Elections Event by Troll Groups (from <https://infodemic.cc>)



Graph 6: Operational examples of troll groups' narratives. (from <https://infodemic.cc>)

## Troll Narratives on the EU adopts measures soon to curb election risks on X, TikTok, Facebook Event

As the EU prepares to implement measures to minimize election risks on platforms like X, TikTok, and Facebook, discussions reveal deep-seated skepticism. Some participants believe the West has developed a substantial disinformation machine, particularly targeting Ukraine, NATO, and the EU, and accuse these entities of manipulating information to promote a neo-Marxist agenda (8.45%). There are also voices that criticize these measures, ridicule them, and advocate strongly for free speech (3.16%).

Percentage	Narratives
8.45%	Some social media users believe the West has a huge disinformation machinery, pointing fingers at Ukraine, NATO, and the EU. They accuse them of manipulating information and pushing a neo-Marxist agenda.
3.16%	The comments display criticism, ridicule, and advocacy for free speech.

Table 5: Key Narratives Surrounding the EU's Adoption of Measures to Soon Curb Election Risks on X, TikTok, Facebook Event by Troll Groups (from <https://infodemic.cc>)



Graph 7: Operational examples of troll groups' narratives. (from <https://infodemic.cc>)

## Non-election EU topics

Apart from the events directly tied to the EU Parliament elections, there are other categories of events related to Europe that could influence the elections' outcome. Upon investigation, a correlation was found between troll groups and the media affiliated with Chinese and Russian states in terms of topic volume. The most discussed topics by these groups include Russia's war in Ukraine and energy



security. In terms of specific interests, troll groups focus on digital regulation, migration, and climate change topics. Meanwhile, Chinese state-affiliated media concentrate on topics that depict China's cooperation with Europe. In contrast, Russian state-affiliated media are engaged in topics that aim to stir up conflict in Euro-American relations.



	Troll Group	 Chinese State-affiliated Media	 Russian State-affiliated Media
Russia's War in Ukraine	38.2%	38.1%	54.2%
Energy Security	11.2%	28.6%	8.3%
Digital Regulation	4.8%	0%	0%
Migration	3.1%	0%	0%
Climate Change	0.8%	0%	0%
China cooperates with Europe	0%	23.8%	0%
Stir up conflict in Euro-American relations	0%	0%	4.1%

Table 6: Troll groups and the media affiliated with Chinese and Russian states exhibit a correlation in topic volume.

## Main Troll Groups

During the EU Elections event, Taiwan AI Labs observed unusual activity from two troll groups. These groups generated significant noise and manipulation on both X and YouTube platforms, actively engaging in international political controversies and policy-related issues without confining themselves to any single nation. We believe the behavior of these two troll groups is atypical and warrants further investigation. Below is a summary of information related to these troll groups.

### Troll Group: Twitter#6630

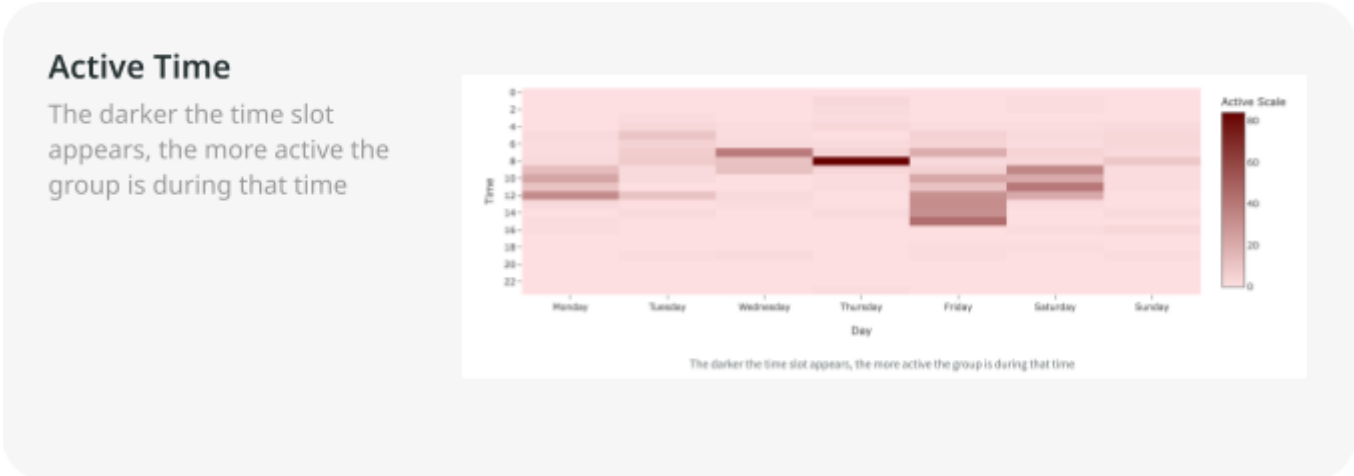
Twitter #6630, observed by AI Labs, is the most active troll group on X (formerly Twitter), with 177 accounts participating in 485 stories.

Troll Accounts	Operated stories	Target entities
177	485	500

Table 10: Summary of Twitter #4952 (from <https://infodemic.cc/collab/twitter@4952>)

### Abnormal Behaviors

Observing the activity trend of X troll group #6630 over the past four months, it's noteworthy that the active time of comments is noticeably concentrated between 8 a.m. and 2 p.m.

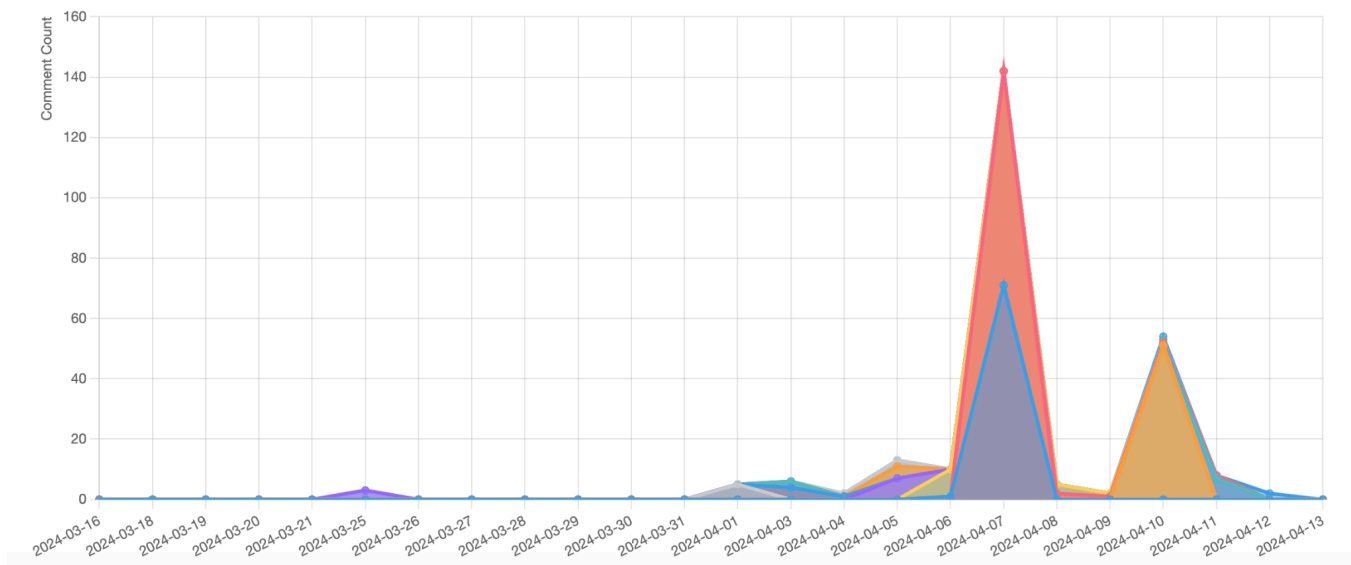


Also, it's evident that over the past four months, X troll group #6630 has shown significant concentration in instant commenting, particularly during the period from March 11th to March 18th, where comments are especially concentrated around the same time of day.



### Operated Stories

The X troll group #6630 actively engages in global conflict-related issues, including the Ukrainian-Russian War, security concerns arising from nuclear energy, and the refugee crisis in the United Kingdom.



Graph 12: Operated stories of Twitter #6630 by timeline (from <https://infodemic.cc/collab/twitter@6630>)

Event time (UTC+8)	Title	Community volume	Troll volume (%)
2024/4/6 04:30 2024/4/7 10:55	Ukraine may run out of air defense missiles if Russia keeps up bombardment, Zelenskiy warns	495,745	72 (18.14%)
2024/4/8 12:04 2024/4/8 12:04	Russia-occupied Zaporizhzhia nuclear plant damaged in drone attack	580,478	71 (17.88%)
2024/4/11 01:08 2024/4/11 01:08	UK Spends Quarter of Foreign Aid Domestically on Refugees	598	51 (12.85%)
2024/4/6 20:46 2024/4/8 18:38	Climate activist Greta Thunberg detained twice at Dutch protest	63,003	9 (2.27%)
2024/4/12 01:52 2024/4/13 02:14	Reporter Laments His Own 'Guilt' In Covering O.J. Simpson's Trial	3,661,194	7 (1.76%)

Table 11: Top 5 operated stories of Twitter #6630 (from <https://infodemic.cc/collab/twitter@6630>)

### Targets of Troll Activities



Graph 13: Troll activity targets of Twitter#6630 (from <https://infodemic.cc/collab/twitter@6630>)

### Troll Group: YouTube #253

YouTube #253 is one of the most active troll groups on the YouTube platform, comprising 3,004 accounts and participating in 2,074 stories.

Troll Accounts	Operated stories	Target entities
3,004	2,074	3,601

Table 14: Summary of YouTube #253 (from <https://infodemic.cc/collab/youtube@253>)

### Abnormal Behaviors

Observing the activity trend of YouTube troll group #253 over the past three months reveals a noteworthy pattern. From January to February, the group actively manipulated topics, resulting in a significantly higher volume of comments compared to regular users. However, starting from March, their level of attack decreased, deteriorating into a state of lower activity even below that of typical users.

### Comment Amount

Higher value means giving more comments.

T00049  
Flooding the Information Space



### Recurrently Commenting to Promote Post

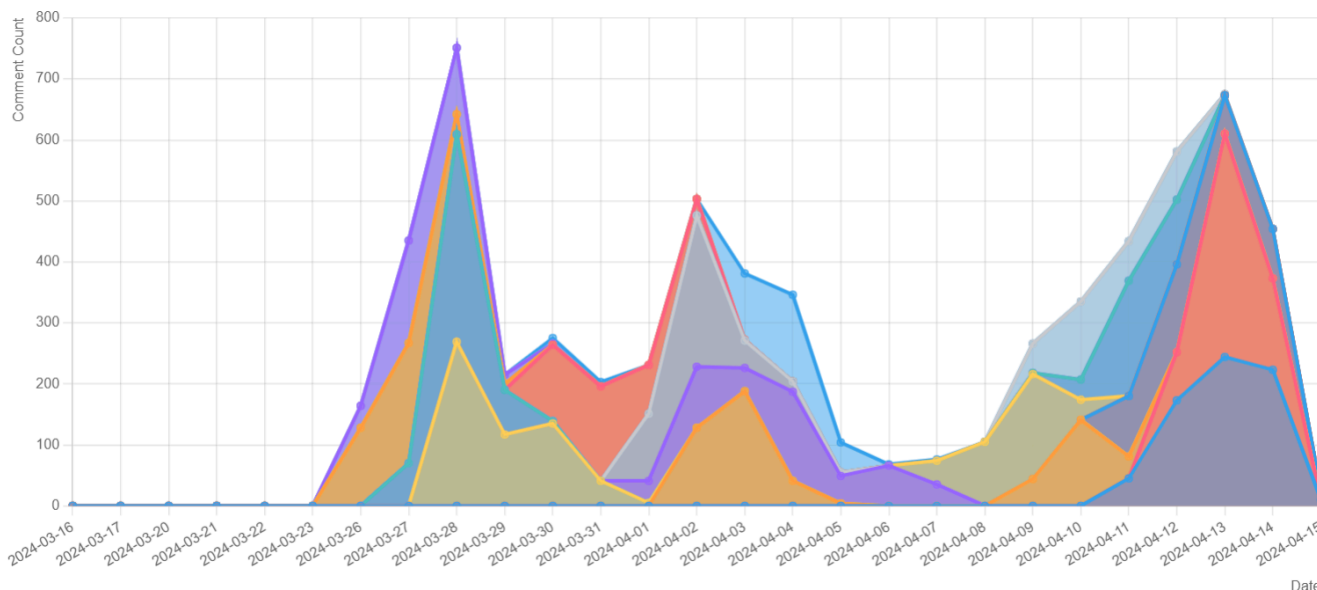
Recurrently commenting on the promoting target posts to heat up the posts again and again.

T0019  
Generate information pollution



### Operated Stories

The YouTube troll group #253 actively engages in issues related to cross-strait relations between Mainland China and Taiwan, while also showing interest in topics such as Israel’s war on Gaza and the partisan divide between the Republican and Democratic parties in the United States. The group’s operations span various regions worldwide.



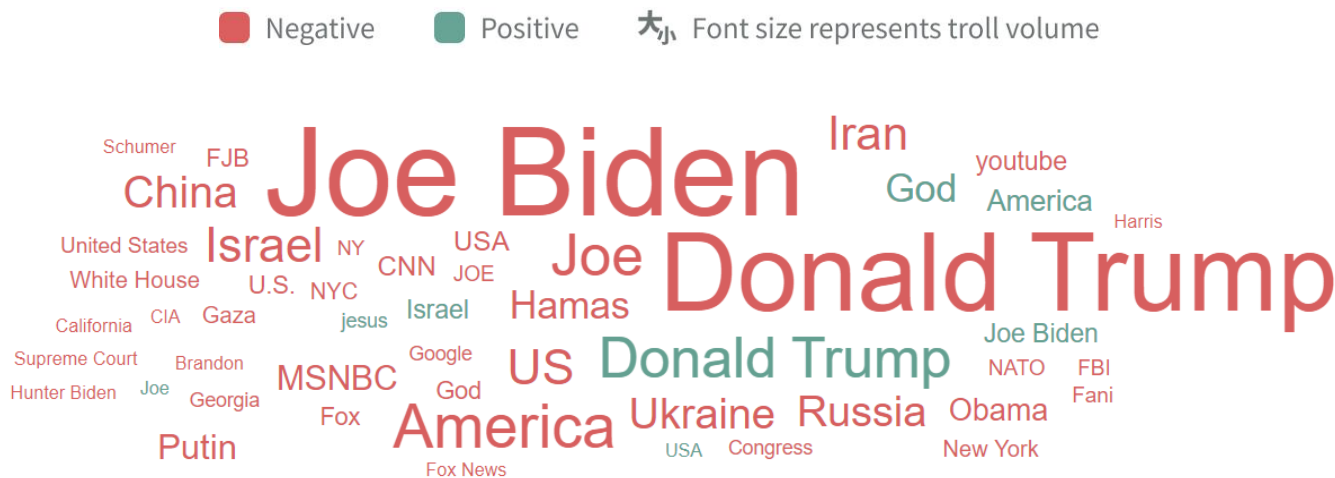
Graph 16: Operated stories of YouTube #253 by timeline(from <https://infodemic.cc/collab/youtube@253>)

Event time (UTC+8)	Title	Community volume	Troll volume (%)
2024/4/14 01:36 2024/4/16 02:33	Ukraine's foreign minister says Israel's response to an Iranian aerial attack shows what Kyiv needs	9,018,133	695 (2.78%)
2024/4/13 09:02 2024/4/14 10:17	Iran's state-run IRNA news agency says Tehran has fired ballistic missiles at targets inside Israel	8,765,028	600 (2.40%)
2024/4/3 13:02 2024/4/11 11:47	Donald Trump loses presidential immunity delay effort for upcoming New York criminal trial	8,018,899	579 (2.31%)
2024/3/29 13:46 2024/3/30 13:24	Donald Trump shares image of Joe Biden bound and gagged	1,192,223	567 (2.27%)
2024/3/29 00:17 2024/3/29 23:14	Biden gets campaign help from Obama and Clinton	335,512	487 (1.95%)

Table 15: Top 5 operated stories of YouTube #253 (from <https://infodemic.cc/collab/youtube@253>)



### Targets of Troll Activities



Graph 17: Troll activity targets of YouTube #253 (from <https://infodemic.cc/collab/youtube@253>)

### DISARM Techniques Used by Troll Groups

Regarding the DISARM framework<sup>2</sup> from NATO, the researcher found that troll group operations on Facebook, YouTube, PTT, and TikTok were divided into two phases: Prepare and Execute

Phase	Tactic	Twitter	Youtube	Weibo	Tiktok
Prepare	T0003 Leverage Existing Narratives	⊙	○	○	○
Execute	T0023.001 Reframe Context	⊙	⊙	○	⊙
	T0049 Flooding the Information Space	○	⊙	○	○
	T0019 Generate information pollution	○	⊙	○	○
	T0116 Comment or Reply on Content	⊙	⊙	⊙	⊙
	T0121 Manipulate Platform Algorithm	⊙	⊙	○	○

- indicates observed manipulative behaviors that align with this Tactic.
- ⊙ signifies observed manipulative behaviors that very closely match this Tactic.

Table 16: DISARM Tactics used on each platform

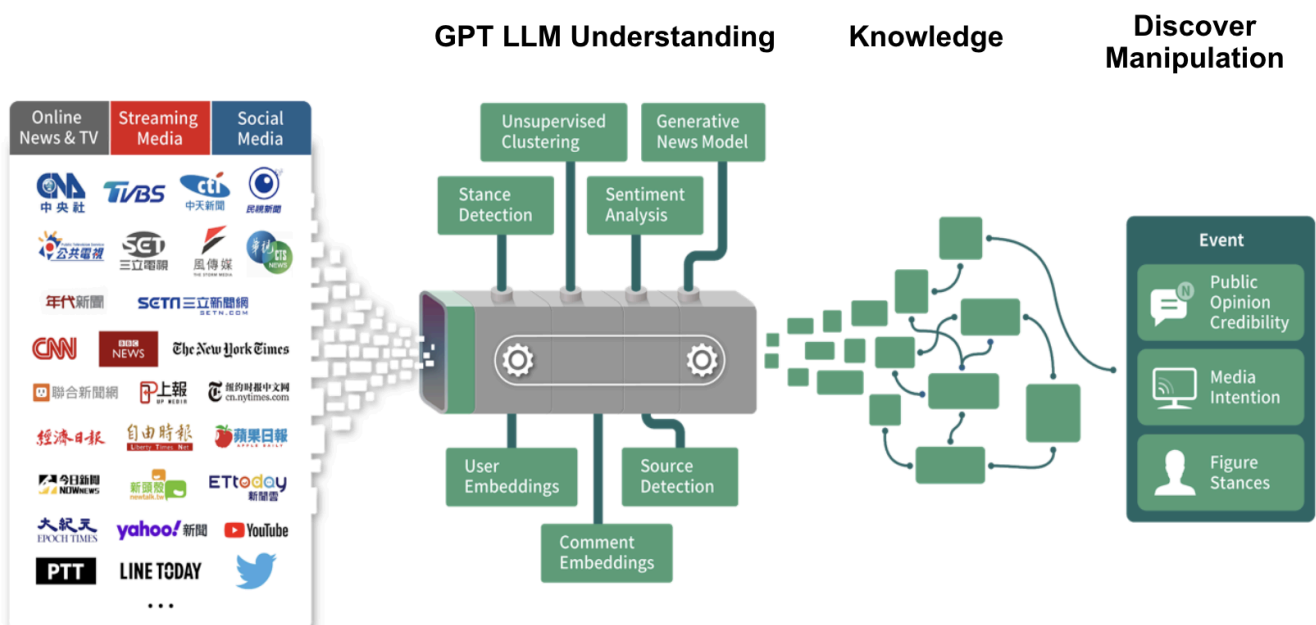
<sup>2</sup> DISARM Disinformation Analysis and Risk Management is an open-source framework designed to describe and understand the behavior parts of FIMI/disinformation. It sets out best practices for fighting disinformation through sharing data & analysis and can inform effective action. The Framework has been developed, drawing on global cybersecurity best practices. <https://www.disarm.foundation/>

## The Infodemic Platform

During the pandemic, Taiwan AI Labs collaborated internationally to develop trustworthy and responsible AI in healthcare while addressing the global challenge of misinformation related to the pandemic. Working with global partners, we established mechanisms to detect such activities. Taiwan AI Labs initially used AI to observe and understand the behavior of various accounts, identifying coordinated activities to detect synchronized accounts.

Troll accounts are defined as a group of accounts not operated by genuine users. These could be accounts publishing specific content as per official directives, or those controlled programmatically or through PR firms, disseminating particular narratives in a non-organic, organized manner. By leveraging generative technologies and large language models (LLMs), Taiwan AI Labs analyzed billions of social media activities to unearth over 30,000 troll groups, understanding the content and patterns of their operations across more than two million topics. This helps to uncover the targets, methods, and possible motives behind these operations.

With the growing global demand for insights into information manipulation, international partners expressed interest in this service. Taiwan AI Labs further developed its capabilities into the Infodemic platform, providing real-time and comprehensive understanding of both domestic and international information manipulation for non-technical partners. This aids in developing digital literacy and response strategies. In recent years, Taiwan AI Labs has continued to use the Infodemic platform to observe coordinated behaviors on major Taiwanese social platforms such as Facebook, YouTube, X (Twitter), TikTok, and PTT. It employs LLMs to comprehend the targets and patterns of information manipulation attacks the responses of mainstream media. It timely records the battlefields of information warfare participated in by troll groups, along with their potential impacts.



Graph 19: Overview of the data analysis process flow on the Infodemic platform.

- This report used data and tools in <https://infodemic.cc>
- How does the system work <https://infodemic.cc/en/faq>

- DISARM Disinformation Analysis and Risk Management is an open-source framework designed for describing and understanding the behavior parts of FIMI/disinformation. It sets out best practices for fighting disinformation through sharing data & analysis, and can inform effective action. The Framework has been developed, drawing on global cybersecurity best practices. <https://www.disarm.foundation/>