



Undermining Trust: How Information Manipulation Eroded American Democracy during the Turbulent July of 2024

Table of Contents

Table of Contents	2
Glossary	3
Executive Summary	5
Methodology	6
Building Similarity Nodes Between User Accounts	7
User Feature Extraction	7
User Behaviour Features	7
Co-occurrence Features	8
User Clustering	8
User Similarity Evaluation	8
User Clustering	8
Group Analysis	8
Opinion Clustering	8
Stance Detection and Narrative Summary	9
Data Coverage	9
Timeline	9
Summary of Main Battlefields	11
Main Troll Groups	12
Troll Group: Facebook#70033	12
Narrative Strategies.....	12
Operated Narratives.....	12
Targets of Troll Activities.....	13
Troll Group: TikTok#144	14
Narrative Strategies.....	14
Operated Narratives.....	14
Targets of Troll Activities.....	15
Troll Group: Twitter#10946	16
Narrative Strategies.....	16
Operated Narratives.....	16
Targets of Troll Activities.....	17
Troll Group: Youtube#72	17
Narrative Strategies.....	17
Operated Narratives.....	17
Targets of Troll Activities.....	18
Troll Group Comprehensive Analysis	18
Key Troll Behaviors.....	19
Key Troll Strategies.....	19
The Infodemic Platform	19

Glossary

Term	Explanation
Troll Account	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.”
Troll Group	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.
Battlefield	An event 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.
Story	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.
Media Volume	Media Volume refers to the amount of media presence, calculated by the number of news reports.
(PRC) State-affiliated Media	(PRC) State-affiliated Media denotes media outlets whose content is controlled or censored by the government of the People's Republic of China.
Social Platform Volume	Social Platform Volume represents the volume on social media platforms, encompassing the total number of comments observed from both troll accounts and regular accounts.
Troll Volume	Troll Volume pertains to the volume of comments made by troll accounts.
User Behavior Features	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.
Co-occurrence Features	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.
User Clustering	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.

Group Analysis	Taiwan AI Labs uses Taiwan LLM, a large language model pre-trained in Taiwanese dialects, to classify the comments and opinions of troll groups, identify their main narratives, and analyze the primary information manipulated by troll groups and their underlying intentions.
Topic Engagement	Taiwan AI Labs employs large language models to analyze social 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.

Executive Summary

From July 1 to July 31, 2024, Taiwan AI Labs observed 333 battlefields and 3,072 media reports related to the U.S. presidential election. Among these, 304 reports (9.9%) were linked to Chinese state-affiliated media. Out of 14,060 identified troll accounts were active in discussions about the election, contributing to a total social platform volume of 381,233, with 5.82% (22,176) related to troll activities.

We identified four main battlefields based on nearly half of the observed troll volume:

1. Trump Hush Money & Immunity Issues,
2. Trump Assassination Attempt,
3. Democratic Primary Developments: Donor Advocates for Change; Harris Secures Nomination Support,
4. Harris Joins Presidential Race as Biden Withdraws.

The first three battlefields made up 21.42% of troll volume, with Facebook #70033 and TikTok #144 being the most active, focusing on Trump's hush money, immunity issues, assassination attempt, and Biden's withdrawal. The fourth battlefield, centered on Harris's candidacy, accounted for 22.32% of troll volume, showing a significant spike after Biden's withdrawal. Twitter #10946, YouTube #72, and Weibo #2497 led on their respective platforms, highlighting increased cross-platform coordination after Biden's withdrawal on July 21.

We identified Facebook #70033, TikTok #144, Twitter #10946, YouTube #72, and Weibo #2497 as the top cross-platform troll groups based on their high troll volume. These groups consistently targeted both the Democratic and Republican parties to undermine the U.S. government's legitimacy but varied in narrative strategies. Notably, these troll groups also emphasized the connection between Trump and Russia to undermine his political image and intensify negative perceptions of him and his supporters, further polarizing and exacerbating political divisions in American society by portraying Trump as a puppet of Putin.

Specifically, Facebook #70033 attacked both parties to erode voter trust, while TikTok #144 posed as Biden's blind supporters to create negative impressions of him. Twitter #10946 critiqued both parties and key political figures, YouTube #72 took a more extreme stance, focusing on attacking Trump and Republicans, and Weibo #2497 disparaged the U.S. electoral system.

First, in the "Trump Hush Money & Immunity Issues" battlefield, Facebook #70033 heavily criticized the Supreme Court, claiming it had become a threat to national stability. They warned that Trump was heading toward dictatorship, likening him to China, Russia, and terrorism, while also accusing Biden of using immunity to bypass the law. In the "Trump Assassination Attempt" battlefield, they speculated that Trump might have staged the incident himself, suggesting it was part of a Deep State conspiracy, and hinted that Democrats could have been involved. In the "Democratic Primary Developments" battlefield, they highlighted deep divisions within the Democratic Party and intensified attacks on Trump, portraying him as a pedophile, racist, and fascist, with ties to the Deep State.

Second, in the same "Hush Money & Immunity Issues" battlefield, TikTok #144 attacked the Supreme Court's delay in ruling on Trump's case, accusing it of enabling his dictatorship and portraying him as a terrorist leader. In the "Assassination Attempt" battlefield, they suggested Trump accepted bribes from Putin, staged the shooting for media attention, and used terms like "civil war" and "murder" to link Trump

to political violence. In the "Democratic Primary Developments" battlefield, they fully supported Biden, condemned Democrats pushing for his withdrawal, and questioned the mainstream media's credibility for not covering Trump's crimes. Finally, in the "Harris Joins Presidential Race" battlefield, they expressed deep concern over the gender and racial discrimination Harris might face.

Third, Twitter #10946 took a similar stance to Facebook #70033, primarily targeting key figures in both parties. They viewed the Democratic Party negatively, labeling its supporters as fools and branding the party as "socialists and communists," while also criticizing Trump and the Republicans, depicting him as Putin's puppet with no moral values.

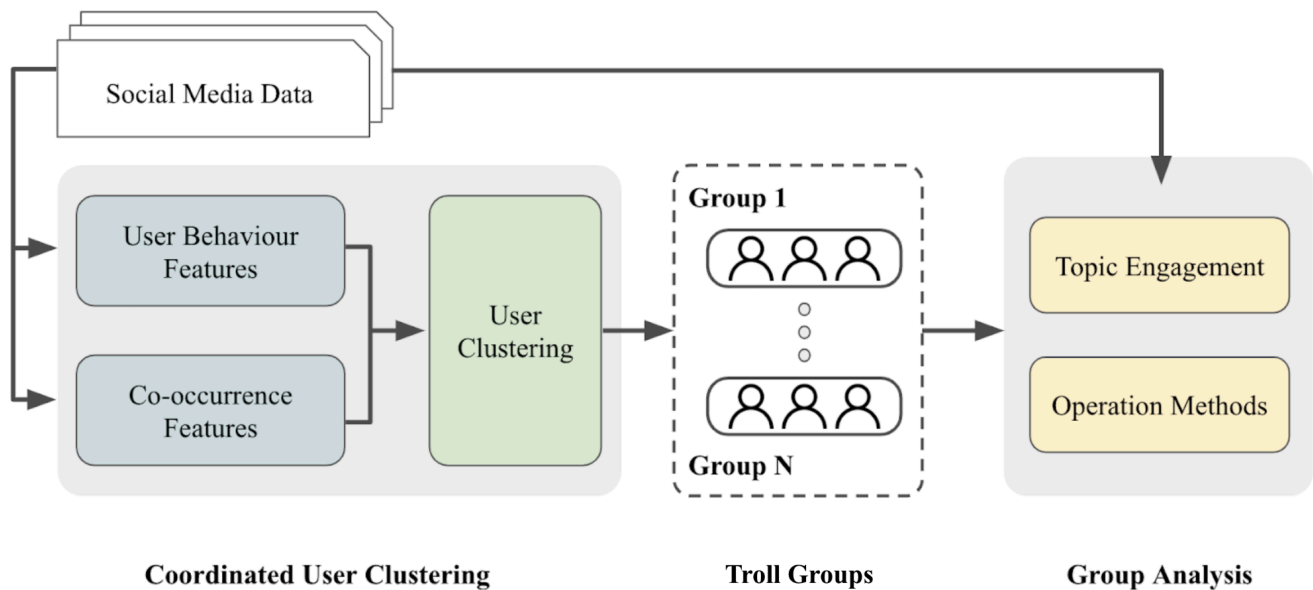
Lastly, YouTube #72's narrative was intensely negative toward Trump, calling him a "lunatic" and "traitor" and claiming he harmed African Americans and the entire U.S. society. They accused Trump of avoiding debates with Kamala Harris, labeling him a coward, and held negative views on his supporters and mainstream media, declaring that MAGA (Make America Great Again) was over and branding FOX News as a mouthpiece for Moscow. They urged voters to support the Democrats, endorsing Harris and her running mate Walz.

Overall, the troll groups in July focused on manipulating and distorting U.S. presidential election issues to erode voter trust in the government, judiciary, and candidates. They used conspiracy theories, spread extreme information, and intensified polarization, further destabilizing society and politics while fueling dissatisfaction with the U.S. political system. After the Trump shooting incident, their narrative became even more extreme, shifting from questioning the Supreme Court to advocating gun ownership and challenging government legitimacy. Following the launch of Trump and Harris's campaigns on July 27, troll activity surged, with signs that their rivalry will be a key focus in August.

Methodology

The Taiwan AI Labs employ their analytical tool "Infodemic" to examine information operations across different social media platforms.

Building Similarity Nodes Between User Accounts



Graph 1: An overview of the coordinated behavior analysis pipeline

Graph 1 depicts the analysis workflow for this report, which consists of three main stages:

- **User Feature Extraction:** We evaluate and quantify users' behavioral characteristics, converting these traits into user vectors for further analysis.
- **User Clustering:** Using these user vectors, we create a network of users with similar patterns. We then apply a social platform detection algorithm to identify groups of highly correlated users, classifying them as collaborative units for closer examination.
- **Group Analysis:** We explore the tactics and strategies of these collaborative units, focusing on their choice of topics, operational methods, and their tendency to either support or oppose 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 about 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 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 social platform detection algorithm that identifies structures within networks based on the flow of information. Social platforms 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 analyzed data from July 1, 2023, to July 31, 2024. During this period, we tracked 333 battlefields and recorded 3,072 instances of media engagement related to keywords associated with the US Presidential Election. Of these instances, 9.9% were linked to media outputs from China and Russia. The analysis identified 14,060 troll accounts actively participating in online discussions across various social media platforms. Out of a total discussion volume of 381,233, 5.82% were attributable to these troll accounts.

Battlefields	Media Volume	(PRC) State-affiliated Media (%)	Troll Accounts	Social Platform Volume	Troll Volume (%)
333	3,072	304 (9.9%)	14,060	381,233	22,176 (5.82%)

Table 1: Analyzed data quantity during the period of the US Presidential Election battlefields
(from <https://infodemic.cc>)

Timeline

The battlefields analyzed by the Infodemic platform are presented in a BeeSwarm Plot, as shown in Graph 2. From July 1, 2023, to July 31, 2024, the analysis highlights the top battlefields as shown in Table 2.

In the sections below, we will provide detailed explanations of the key battlegrounds influenced by troll groups each month, and identify the main troll groups involved in each.

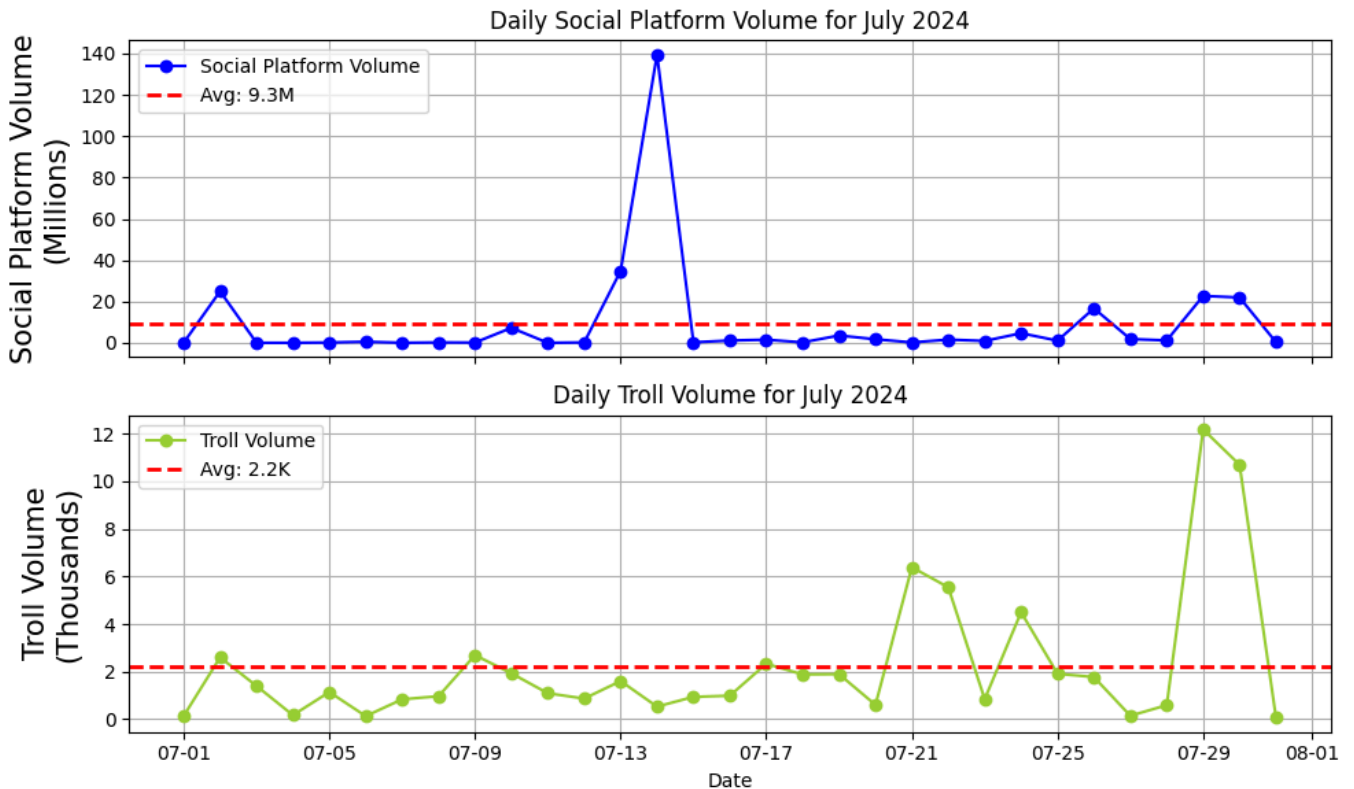
Date	Top Troll Participated Battlefields (accumulated %)
July 2024	<ul style="list-style-type: none"> • Trump Hush Money & Immunity Issues (10.86%) • Trump Assassination Attempt (15.95%) • Democratic Primary Developments: Donor Advocates for Change; Harris Secures Nomination Support (21.42%) • Harris Joins Presidential Race as Biden Withdraws (43.74%)

*The number associated with each event represents the cumulative volume of troll activity.

Table 2: Analyzed top events of the US Presidential Elections from July 1, 2023, to July 31, 2024 (from <https://infodemic.cc>)

According to Graph 2 below, the Trump assassination attempt battlefield marked the turning point in July. While overall social platform volume peaked on July 13, troll activity increased after the shooting, showing clear signs of coordinated operations between Biden’s withdrawal announcement on July 21 and Trump’s suggestion of a possible debate with Harris on July 29.

As troll activity surged, their narratives became more extreme, introducing conspiracy theories questioning the legitimacy and authority of the U.S. government. The focus shifted from criticizing the Supreme Court to questioning public safety and advocating for gun ownership. Notably, after the Supreme Court upheld the federal law banning domestic abusers from owning guns on June 21, troll groups intensified their efforts, indicating that gun issues are a key topic for these groups in manipulating the U.S. election and warrant continued monitoring.



Graph 2: Overview of Social Platform and Troll Volumes by Date (Eastern Time Zone) with a Red-Dotted Average Line (data extracted from <https://infodemic.cc>)

Summary of Main Battlefields

Trump Hush Money & Immunity Issues: From our U.S. election reports from October 2023 to June 2024, we can see that the issue of Trump's hush money case and whether he has immunity has been a significant topic manipulated by collaborative groups in October 2023, February, March, April, and May 2024. Therefore, when the Supreme Court ruled in early July that the President enjoys criminal immunity while performing executive duties, and postponed the verdict on Trump's hush money case to September 18, these troll groups began information operations. Their main narrative strategies were spreading skepticism about the United States, polarizing American society, questioning democratic rule of law, and spreading fears of dictatorship.

Trump Assassination Attempt: On July 13, Trump was shot at during a campaign rally in Pennsylvania, resulting in an injury to his right ear that caused bleeding. We observed that this sudden and significant incident triggered a large amount of operations by troll groups. Their main narrative strategies were spreading conspiracy theories that Trump staged the attack, dividing U.S. politics, and spreading fear of political violence.

Democratic Primary Developments: Donor Advocates for Change; Harris Secures Nomination Support: After the first televised debate between the two presidential candidates on June 27, the calls for Biden to withdraw from the U.S. presidential race grew louder. On July 14, Christy Brown, one of Kentucky's wealthiest Democratic donors, also called for Biden to withdraw from the race. We observed that the troll groups' main narrative strategies on this issue were polarizing American society, intensifying divisions within the Democratic Party, and questioning the credibility of mainstream media.

Harris Joins Presidential Race as Biden Withdraws: After Biden announced his withdrawal from the race on July 21, he expressed his support for Vice President Kamala Harris to become the Democratic presidential candidate, and within a week, she raised \$200 million in donations, 66% of which came from first-time donors. The troll groups' main strategies were polarizing American society, intensifying gender divisions, exacerbating racial discrimination, and creating voter unease or disappointment with Harris as Biden's replacement.

<i>Battlefields</i>	<i>Summary of Troll Narratives</i>	<i>Main Troll Group</i>
Trump Hush Money & Immunity Issues	Comments mainly criticized the Supreme Court and Trump's dictatorial tendencies, comparing them to China, Russia, and terrorism, while also criticizing Biden for abusing immunity.	Facebook # 70033 TikTok # 144 Youtube # 72
Trump Assassination Attempt	Comments questioned whether Trump staged the shooting himself, linking it to Deep State conspiracy theories and hinting at possible Democratic involvement in an assassination plot.	Facebook # 70033 TikTok # 144
Democratic Primary Developments: Donor Advocates for Change; Harris Secures Nomination Support	Comments emphasized divisions within the Democratic Party, aggressively attacking Trump, portraying him as a fascist and dictator, hinting at his ties to the Deep State.	Facebook # 70033 TikTok # 144
Harris Joins Presidential Race as Biden Withdraws	Comments expressed concern over gender and racial discrimination against Harris, heavily criticized Trump and his supporters, and called for support of Harris	TikTok # 144 Twitter # 10946

	and her running mate, Walz.	Youtube # 72 Weibo #2497
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Table 3: Summary of troll narratives of main battlefields (from <https://infodemic.cc>).

Main Troll Groups

After analyzing the behavior and narratives of troll groups, we found that Facebook #70033 and TikTok #144 led in volume, actively participating in information operations around the July U.S. presidential election. In the fourth battlefield, "Harris Joins Presidential Race as Biden Withdraws," Twitter #10946, YouTube #72, and Weibo #2497 were the most active. Notably, Weibo #2497 focused more on China's domestic affairs and the Paris Olympics, with limited criticism of the U.S. electoral system, suggesting that even an incompetent person can become president with capitalist support, thereby undermining trust in American democracy. Following are our detailed observations of the main troll groups.

Troll Group: Facebook#70033

Facebook #70033, observed by AI Labs, is the most active troll group on Facebook, with 385 accounts participating in 2,220 stories overall.

Troll Accounts	Operated stories	Target entities
385	2,220	1,262

Table 4: Summary of Facebook#70033 (from <https://infodemic.cc/en/collab/facebook@70033>)

Narrative Strategies

Facebook #70033 was highly active in discussions related to the U.S. election in July, particularly in the topics of Trump Hush Money & Immunity Issues, Trump Assassination Attempt, Democratic Primary Developments, where it was the most prominent actor in amplifying narratives. However, there was little evidence of activity in the topic of Harris Joins Presidential Race as Biden Withdraws.

Notably, our in-depth analysis reveals that Facebook #70033's strategy was to criticize both Trump and the Republican Party as well as Biden and the Democratic Party, without showing a clear bias towards either side. Instead, by simultaneously attacking the two major political parties in the U.S., it aimed to undermine the legitimacy and authority of the American government.

Operated Narratives

First, in the "Trump Hush Money & Immunity Issues" battlefield, Facebook #70033 expressed disdain for the Supreme Court, insinuating that it is undermining the U.S. government and posing a threat to the American people. Additionally, Facebook #70033 warned that Trump is heading towards dictatorship, equating him with the dangers posed by China, Russia, and terrorism. However, while criticizing both the Supreme Court and Trump, Facebook #70033 also mocked Biden, suggesting that he too benefits from immunity, placing himself above the law.

Graph 3: Troll activity targets of Facebook #70033 (from <https://infodemic.cc/zh-hant/collab/facebook@70033>)

Troll Group: TikTok#144

TikTok #144, observed by AI Labs, is the most active troll group on TikTok, with 292 accounts participating in 1,257 stories recently.

Troll Accounts	Operated stories	Target entities
292	1,257	324

Table 6: Summary of TikTok #144 (from <https://infodemic.cc/zh-hant/collab/tiktok@144>)

Narrative Strategies

TikTok #144 was highly active in discussions related to the U.S. election in July, second only to Facebook #70033 in terms of engagement. Moreover, TikTok #144 showed clear signs of activity in the topics of Trump Hush Money & Immunity Issues, Trump Assassination Attempt, Democratic Primary Developments, and Harris Joins Presidential Race as Biden Withdraws.

Our in-depth analysis reveals that TikTok #144 clearly leaned in favor of Biden and Harris. Approximately half of the comments from TikTok #144 strongly supported Biden and Harris, even criticizing other Democratic figures when necessary. Additionally, TikTok #144 also criticized Trump, the Supreme Court, and the Republican Party, often using radical and insinuating language.

Operated Narratives

First, in the battlefield of Trump Hush Money & Immunity Issues, TikTok #144 criticized the Supreme Court's decision to delay the verdict on Trump's hush money case, accusing it of paving the way for Trump's power grab and dictatorship, and portraying Trump as a leader of terrorists.

Second, in the battlefield of the Trump Assassination Attempt, TikTok #144 suggested that the shooting occurred because Trump staged it himself after accepting bribes from Putin, directly accusing Trump of being as corrupt as Putin. The group implied that Trump orchestrated the event to gain media attention and used extreme rhetoric like "civil war," "getting guns," and "murder" to suggest that Trump was exacerbating political violence.

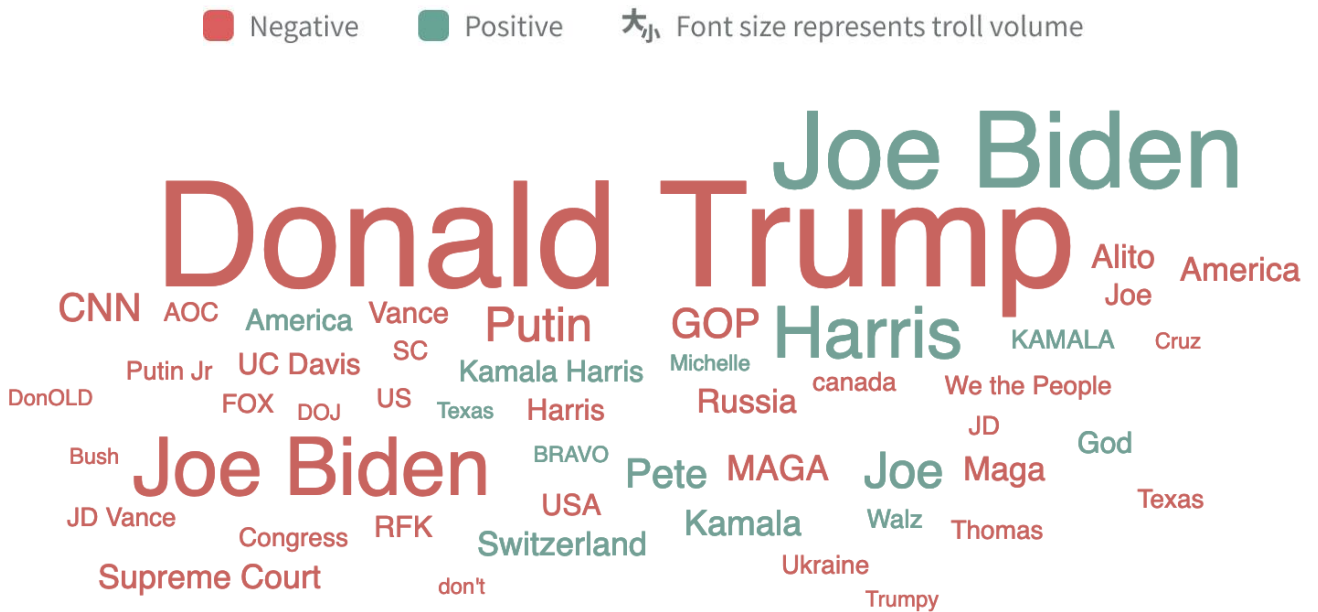
Third, in the battlefield of Democratic Primary Developments, TikTok #144 strongly supported Biden, mocking the Democrats who wanted Biden to withdraw from the race as "assholes," claiming they were destroying the Democratic Party and American democracy. Additionally, when Biden's cognitive abilities were questioned, TikTok #144 also questioned Trump's cognitive abilities and wondered why mainstream media had not reported on Trump's numerous crimes, thereby casting doubt on the credibility of the mainstream media.

Fourth, in the battlefield of Harris Joins Presidential Race as Biden Withdraws, TikTok #144 expressed concern about the potential gender and racial discrimination against Harris, speculating that she would be subjected to extreme rhetoric in the future.

Entity	Key Narratives Overview
<p>Donald Trump –</p> <p>Supreme Court –</p> <p>Republican Party –</p> <p>21.48%</p>	<ul style="list-style-type: none"> • "Every action SCOTUS has taken has been calculated to delay Trump's trial & to lay the groundwork for dictatorship." • "The reps set it up to make Trump the martyr, they're all corrupt, probably paid by Putin..." • "His cult is already talking about a civil war & getting guns." • "It's ridiculous that MSM isn't covering Trump's multitude of actual crimes."
<p>Joe Biden +</p> <p>Kamala Harris +</p> <p>22.46%</p>	<ul style="list-style-type: none"> • "Even if Biden fell asleep during the debate or dropped dead, I will still vote for him. 1000 times better than Trump." • "Biden is getting too much press, I wouldn't be surprised if it was staged!!" • "The LGBTQ+ community will be on board, too! Harris is uniting all of us and I love it!" • "This is just the beginning. The veiled racism is next - calling her a h0e, questioning her birth, questioning her education. Then the direct racism. Been there, done that."
<p>Democratic Party –</p> <p>5.68%</p>	<ul style="list-style-type: none"> • "These asshole Democrats, who are trying to have everything their way, will regret this later on guaranteed." • "Yep. The Dems are destroying their own party and our democracy."

Table 7: Key Narratives Overview (from <https://infodemic.cc/zh-hant/collab/tiktok@144>)

Targets of Troll Activities



Graph 4: Troll activity targets of TikTok#144 (from <https://infodemic.cc/zh-hant/collab/tiktok@144>)

Troll Group: Twitter#10946

Twitter #10946, observed by AI Labs, is the most active troll group on Twitter, with 984 accounts participating in 1,983 stories recently.

Troll Accounts	Operated stories	Target entities
984	1,983	977

Table 8: Summary of Twitter #10946 (from <https://infodemic.cc/en/collab/twitter@10946>)

Narrative Strategies

Twitter #10946 exhibited strong opposition and employed a strategy similar to Facebook #70033. Both targeted the two major U.S. political parties to undermine the legitimacy and authority of the U.S. government. Notably, Twitter #10946 showed significant operations around the fourth battlefield: "Harris Joins Presidential Race as Biden Withdraws," especially in the context of July's election discussions. This indicated that, post-shooting, the rhetoric from troll groups became more extreme, questioning the overall legitimacy of the U.S. government, creating greater societal division, and fostering distrust in the American political status quo.

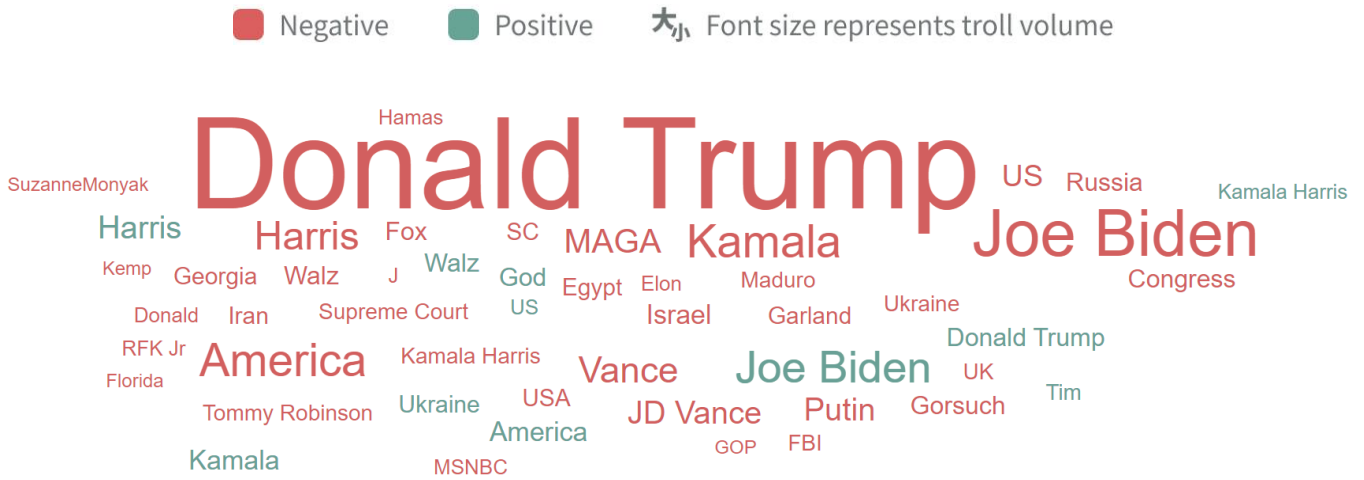
Operated Narratives

Twitter #10946 primarily focused on strong criticism of the two major U.S. parties. They repeatedly attacked the Democratic Party, calling its supporters "morons," accusing the party of being "socialist and communist," and claiming that Kamala Harris is a lousy candidate who would make an even worse president. Conversely, they also mocked Trump and his supporters, suggesting that Trump is Putin's "chump" without values, emotions, or conscience, and warning against underestimating his statements and actions. Additionally, they compared Trump's behavior to the successes of Obama and racists, questioning Trump's honesty and sanity.

Entity	Key Narratives Overview
<p>Donald Trump –</p> <p>Republican Party –</p> <p>23.27%</p>	<ul style="list-style-type: none"> "Darnold Trump is Putin's Chump. Vote American! Vote for the American Democratic Party!" "Don't underestimate what he'll do or say bc ya know, he has zero values, feelings or conscience!"
<p>Joe Biden –</p> <p>Kamala Harris –</p> <p>Democratic Party –</p> <p>12.78%</p>	<ul style="list-style-type: none"> "Only morons vote Democrat #OnIMoronsVoteDemocrat" "She's a lousy candidate and would be an even worse president." "Socialist and communist party."

Table 9: Key Narratives Overview (from <https://infodemic.cc/en/collab/twitter@10946>)

Targets of Troll Activities



Graph 5: Troll activity targets of Twitter #10946 (from <https://infodemic.cc/en/collab/twitter@10946>)

Troll Group: Youtube#72

Youtube #72, observed by AI Labs, is the most active troll group on Youtube, with 4,355 accounts participating in 1,687 stories recently.

Troll Accounts	Operated stories	Target entities
4,355	1,687	3,706

Table 10: Summary of Youtube #72 (from <https://infodemic.cc/en/collab/youtube@72>)

Narrative Strategies

YouTube #72, like Twitter #10946, showed notable manipulation in discussions related to the U.S. election in July, particularly around the fourth battlefield, "Harris Joins Presidential Race as Biden Withdraws." While YouTube #72 did not criticize Biden or the Democrats, approximately 20% of its content strongly supported them. Conversely, about 80% of the content criticized Trump and the Republicans with extreme and emotional language.

This suggests that YouTube #72's strategy aimed to exacerbate social divisions by using radical criticism to provoke polarized emotions. This approach may lead voters to either develop aversion or sympathy towards the heavily criticized targets, potentially influencing their voting choices.

Operated Narratives

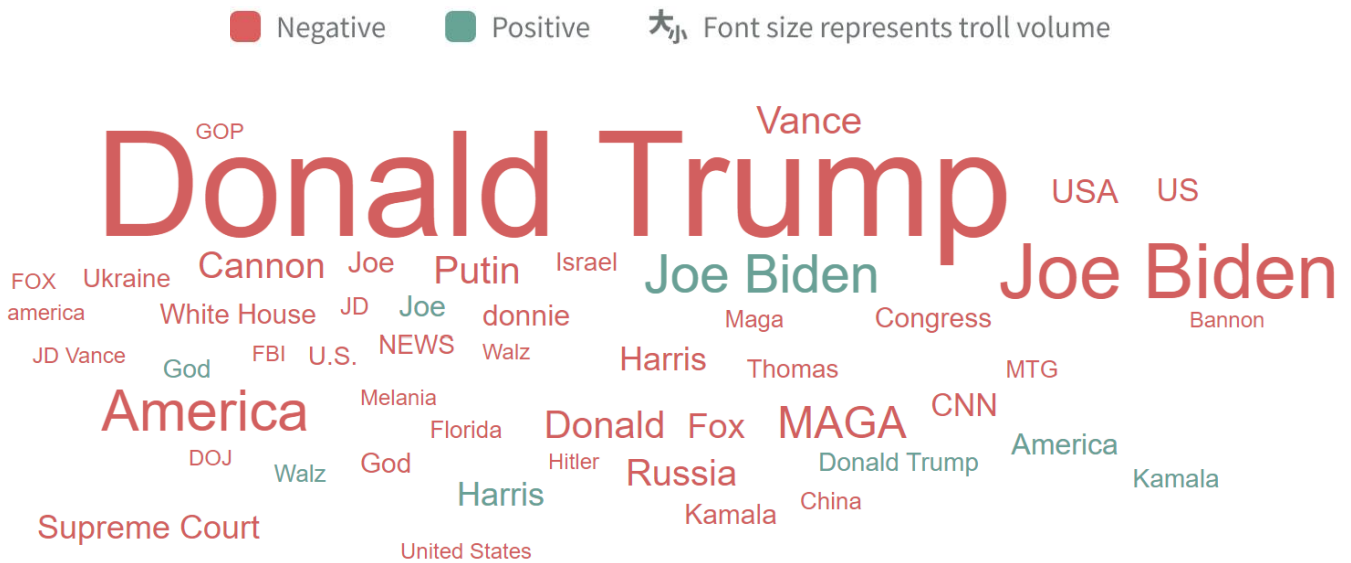
YouTube #72 focused on severe criticism and denigration of Trump. He was described as a "lunatic," "traitor," and "sexual predator," with views that he was harmful to African Americans and American society as a whole. There were accusations that Trump planned to steal the election and criticism for avoiding debates with Kamala Harris, portraying him as a coward. Additionally, there was strong negativity towards Trump's supporters and the media, with claims that MAGA (Make America Great

Again) was finished and FOX News was labeled as a promoter of hate and a mouthpiece for Moscow. Finally, there were calls to support the Democratic Party and vote for Harris and her running mate Walz.

Entity	Key Narratives Overview
<p>Donald Trump –</p> <p>Republican Party –</p> <p>23.27%</p>	<ul style="list-style-type: none"> • "MAGA is done. Farts and prayers." • "Trump is a total waste of oxygen, and a complete idiot!" • "Trump is running to become a Dictator and to go to prison." • "Fox is a disgusting form of entertainment." • "Faux News is nothing more than a mouthpiece for Moscow."
<p>Joe Biden +</p> <p>Kamala Harris +</p> <p>Democratic Party +</p> <p>5.82%</p>	<ul style="list-style-type: none"> • "Vote Harris / Walz." • "Vote Blue down the ballot."

Table 11: Key Narratives Overview (from <https://infodemic.cc/en/collab/youtube@72>)

Targets of Troll Activities



Graph 6: Troll activity targets of Youtube #72 (from <https://infodemic.cc/en/collab/youtube@72>)

Troll Group Comprehensive Analysis

From July 1 to July 31, 2024, Taiwan AI Labs conducted an in-depth analysis of coordinated disinformation operations related to the U.S. presidential election. The following are our two key findings related to troll behaviors and strategies.

Key Troll Behaviors

The first three battlefields—Trump Hush Money & Immunity Issues, Trump Assassination Attempt, and Democratic Primary Developments—accounted for 21.42% of troll volume, with Facebook #70033 and TikTok #144 being highly active. The Trump assassination attempt marked a turning point, with a peak in troll activity and increased operations. As narratives grew more extreme, trolls shifted focus from criticizing the Supreme Court to questioning the legitimacy of the U.S. government and advocating for gun ownership, highlighting gun issues as a key topic for manipulation. After Biden's withdrawal, there was a notable surge in troll activity centered on Harris's candidacy. The fourth battlefield, focused on Harris's candidacy, accounted for 22.32% of troll volume post-withdrawal, with TikTok #144, Twitter #10946, YouTube #72, and Weibo #2497 leading the discussions.

Key Troll Strategies

Facebook #70033 and TikTok #144 were the most active troll groups. Facebook #70033 focused on eroding trust in both Trump and Biden, while TikTok #144 posed as blind supporters of Biden and Harris to create negative impressions of them. Both groups criticized the Supreme Court and Trump, spread conspiracy theories about the Trump assassination attempt, and exacerbated divisions within the Democratic Party. Similarly, Twitter #10946 and YouTube #72 targeted both major political parties, with YouTube #72 intensifying attacks on Trump and his supporters, and Twitter #10946 highlighting criticisms of both parties and key political figures. Weibo #2497 concentrated on undermining trust in the U.S. electoral system, suggesting that American democracy was compromised by capitalist influence.

Overall, the tactics employed by the main troll groups extended beyond merely attacking political figures. They also sought to undermine the integrity of the U.S. judiciary and the credibility of mainstream media, deepening societal divisions and fostering distrust in the political system. As the election season progresses, these groups are likely to escalate their narratives further, contributing to increased polarization and instability.

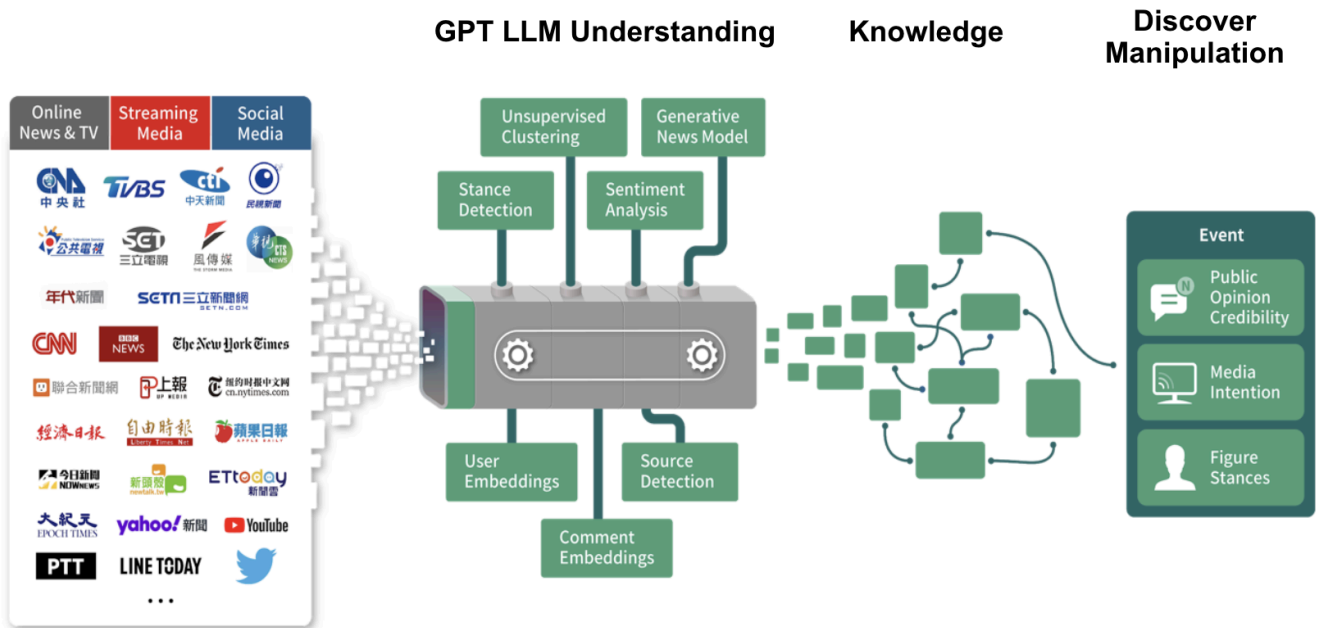
The Infodemic Platform

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 and the responses of mainstream media. It timely records the battlefields of information warfare participated in by troll groups, along with their potential impacts.



Graph 7: Overview of the data analysis process flow on the Infodemic platform.

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