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More Tweets, More Impact? A Case Study of Nepali Politicians

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Abstract:
The rapid digitalization of Nepali politics has prompted a shift in communication strategies, with many political actors adopting high-frequency posting to maximize visibility. This study investigates the relationship between posting volume ("Velocity") and audience reception ("Quality") among 42 prominent Nepali politicians on Twitter (X) from January 2023 to the present. Utilizing a weighted engagement model where retweets and replies are valued higher than likes based on a calculated 1:10 scarcity ratio the research segments politicians into High, Medium, and Low tiers to isolate the variable of existing popularity. Contrary to the "flooding the zone" hypothesis, the findings reveal a "Quality Trap" for established political figures. Pearson correlation analysis demonstrates a significant negative correlation ($r=-0.51$) for "Rising Star" politicians (Medium Tier), indicating that increased posting frequency dilutes average engagement and triggers audience fatigue. For elite leaders (High Tier), no significant correlation was found ($r=-0.17$), suggesting their audience is saturated and unresponsive to volume. A positive correlation ($r=+0.28$) was observed only among Low Tier micro-influencers, for whom frequency serves as a necessary discovery mechanism. These results challenge the efficacy of high-volume digital strategies in Nepal, concluding that while frequency aids initial visibility, established influence relies heavily on content curation over quantity.

Keywords: ***Political Communication, Digital Engagement, Twitter Analysis, Nepali Politics***

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Introduction

Political communication was historically dominated by traditional media like newspapers, radio, and television, with limited interactive public feedback. However, as internet access and social media platforms expanded, online political activity began influencing public political socialization and awareness across urban and youth populations (Bhattarai, 2023). Studies show social media's role in political engagement grew significantly since the 2008 Constituent Assembly elections, with parties using digital tools such as Facebook, Twitter, and YouTube to reach voters, though often without cohesive digital strategies (Baral, 2022) . Research indicates these platforms serve as primary conduits for political expression and mobilization in Nepal's socio-political landscape (Kharel, 2024).

This research is important because it explains how Twitter engagement reflects genuine public attention and political influence in Nepal's digital political space, not just posting activity. It offers factual insight into how citizens interact with political communication online, strengthening understanding of contemporary democratic engagement.

The objective of this research is to quantitatively assess whether higher tweet frequency by selected Nepali politicians leads to higher public attention, measured through likes, retweets, and replies per tweet during a defined study period.

Literature Review

The advent of social media has fundamentally restructured political communication, enabling a transition from traditional "gatekeeper" media models where information was filtered by journalists to a decentralized network of direct interaction (Eldridge II et al., 2019; Angelova, 2025). Platforms like Twitter (now X) allow political actors to bypass mainstream media and communicate directly with constituents, a phenomenon known as "disintermediation" which theoretically democratizes information access (Eldridge II et al., 2019; Lariscy et al., 2013). However, this direct line is a double-edged sword; while it increases accessibility, algorithmic curation often traps users in "echo chambers" where pre-existing beliefs are reinforced rather than challenged, leading to heightened political polarization (Jiang et al., 2021; Angelova, 2025). Consequently, digital spaces have evolved into critical battlegrounds where the volume of information often supersedes the quality of discourse, creating an environment ripe for both mobilization and manipulation (Alcántara-Lizárraga & Jima-González, 2024; Guess et al., 2023).

Despite skepticism regarding "slacktivism," empirical research confirms a strong correlation between online political engagement and offline civic participation (Boulianne, 2015; Galais & Anduiza, 2016). Studies demonstrate that users who actively interact with political content through liking, sharing, or debating are significantly more likely to vote, attend rallies, and participate in civic movements (Boulianne, 2015; CIRCLE, 2018; Galais & Anduiza, 2016). For instance, data from election cycles indicates that social media activity can tangibly impact vote shares by influencing moderate voters, effectively turning "engagement metrics" into reliable indicators of real-world political influence (Fujiwara et al., 2024; Bond et al., 2012). This validates the use of Twitter data not merely as a record of digital sentiment, but as a proxy for analyzing genuine political capital and mobilization potential (Steinert-Threlkeld, 2017; Enikolopov et al., 2020).

In the context of Nepal, this digital transformation is driven by a distinct demographic "youth bulge," where social media has surpassed family networks as the primary agent of political socialization (Adhikari, 2026; Acharya, 2017; The Outlook: Journal of English Studies, 2023). Recent events, such as the youth-led mobilizations of 2025, highlight that Nepali digital

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politics is no longer about passive consumption but active disruption (Harvard T.H. Chan School of Public Health, 2025; Britannica, 2025). However, a critical gap remains in understanding the efficiency of this communication; while many political figures employ a "high-velocity" strategy flooding the zone with content current research suggests that unidirectional broadcasting often fails to generate meaningful engagement compared to high-quality, bidirectional dialogue (Acharya, 2019; Nepalitimes, 2024; ARC Journals, n.d.). This study seeks to bridge that gap by differentiating between the mere volume of tweets and the actual quality of audience impact.

Methodology

To rigorously analyze the relationship between political posting intensity and public engagement, this study employed a multi-stage data processing and analysis framework. The methodology was divided into four distinct phases: Data Cleaning, Strategic Segmentation, Feature Engineering, and Statistical Correlation.

Phase 1: Data Cleaning and Preprocessing

The raw dataset (Neupane et al., 2024) was first subjected to a rigorous cleaning process to ensure data integrity.

Duplicate Removal & Imputation

Duplicate entries caused by API fetch errors were identified and removed from the dataset. Missing values, particularly in engagement columns (e.g., where a tweet had zero replies), were filled with integer zeros to allow for mathematical operations.

DateTime Unification

To enable time-series analysis, the separate date and time columns must be merged into a single datetime object. This facilitates the calculation of posting frequency over specific intervals (e.g., daily or weekly). Concatenate date and time and convert the result to a standardized datetime format (e.g., ISO 8601).

Metric Evaluation

A preliminary correlation analysis was conducted between Likes, Retweets, and Replies. This step was crucial to determine the relative importance of each metric.

Phase 2: User Segmentation (Tier Classification)

To ensure a fair comparison, politicians were not analyzed as a single monolithic group but were segmented based on their audience size.

Log-Scale Distribution Analysis

The follower counts exhibited a heavy right-skew (a few leaders have millions, while most have thousands). To address this, we applied Logarithmic Scaling to the follower counts. This transformation normalized the distribution, allowing us to visualize the data effectively and identify natural clusters/breaks in the population.

Tier Assignment

Based on the log-transformed distribution, politicians were categorized into three distinct tiers: High, Medium, and Low. This segmentation prevents "apples-to-oranges" comparisons, ensuring that grassroots politicians are judged against their peers rather than against national party leaders.

Phase 3: Temporal Scoping and Feature Engineering

Once the data was clean and segmented, we engineered specific metrics to quantify "Intensity" and "Quality." In temporal filtering, we analyzed the activity timeline of every politician. To avoid skewing the data with inactive historical accounts, the dataset was filtered to include only the "Modern Era" (activity from January 1, 2023, to Present). In Velocity Score

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(Intensity Metric) instead of using raw tweet volume, we calculated a "Velocity Score" for each user using the formula:

$$Velocity\ Score = \frac{Total\ Tweets}{Unique\ Active\ Days}$$

This metric provides a more accurate representation of daily posting intensity by normalizing gaps in activity. Furthermore, we calculated an engagement score for each individual tweet rather than summing total engagement. This approach is necessary to measure the *average quality* of content; otherwise, a user who spams thousands of low-quality tweets might appear more successful than a user with a few high-impact posts.

The score was calculated using the weighted formula derived from Phase 1:

$$Score = (w * Like) + (w * Retweets) + (w * Replies)$$

Finally, these scores were aggregated to find the Mean Engagement Score for each politician.

Phase 4: Correlation Analysis

The final phase involved quantifying the relationship between the engineered features. In comparative analysis we merged the Velocity Score and Average Engagement Score into a performance matrix. In correlation coefficient we calculated the Pearson Correlation Coefficient (r) between Velocity and Engagement separately for each Tier (High, Medium, Low). This allowed us to determine whether increasing posting frequency positively correlates with public attention, or if it leads to diminishing returns (audience fatigue).

Setup and Experiment

Computational Environment

The analysis was conducted using a Python 3.x environment within a Jupyter Notebook. The following primary libraries were utilized for data manipulation and visualization:

- Pandas: For structural data cleaning, time-series conversion, and aggregation of user activity metrics.
- Matplotlib & Seaborn: For generating high-dimensional visualizations, including the 3-panel scatter plots and correlation heatmaps.
- NumPy: For logarithmic scaling and handling numerical operations on large arrays.

Experimental Design

To test the hypothesis that “Posting Frequency influences Audience Engagement,” a controlled statistical experiment was conducted. The independent variable (X) is the Velocity Score, which measures the politician’s posting effort through tweets per active day. This represents the input of the analysis.

The dependent variable (Y) is the Average Engagement Score, calculated using weighted likes, retweets, and replies. This reflects the output or audience response to the posting behavior.

To control for differences in popularity, the data was divided into three tiers High, Medium, and Low based on follower count. This helped isolate the effect of posting frequency by reducing the influence of existing popularity on engagement results.

Execution Procedure

The experiment was executed on the processed df_2023 dataset, which was rigorously filtered to include only activity from January 1, 2023, to the present.

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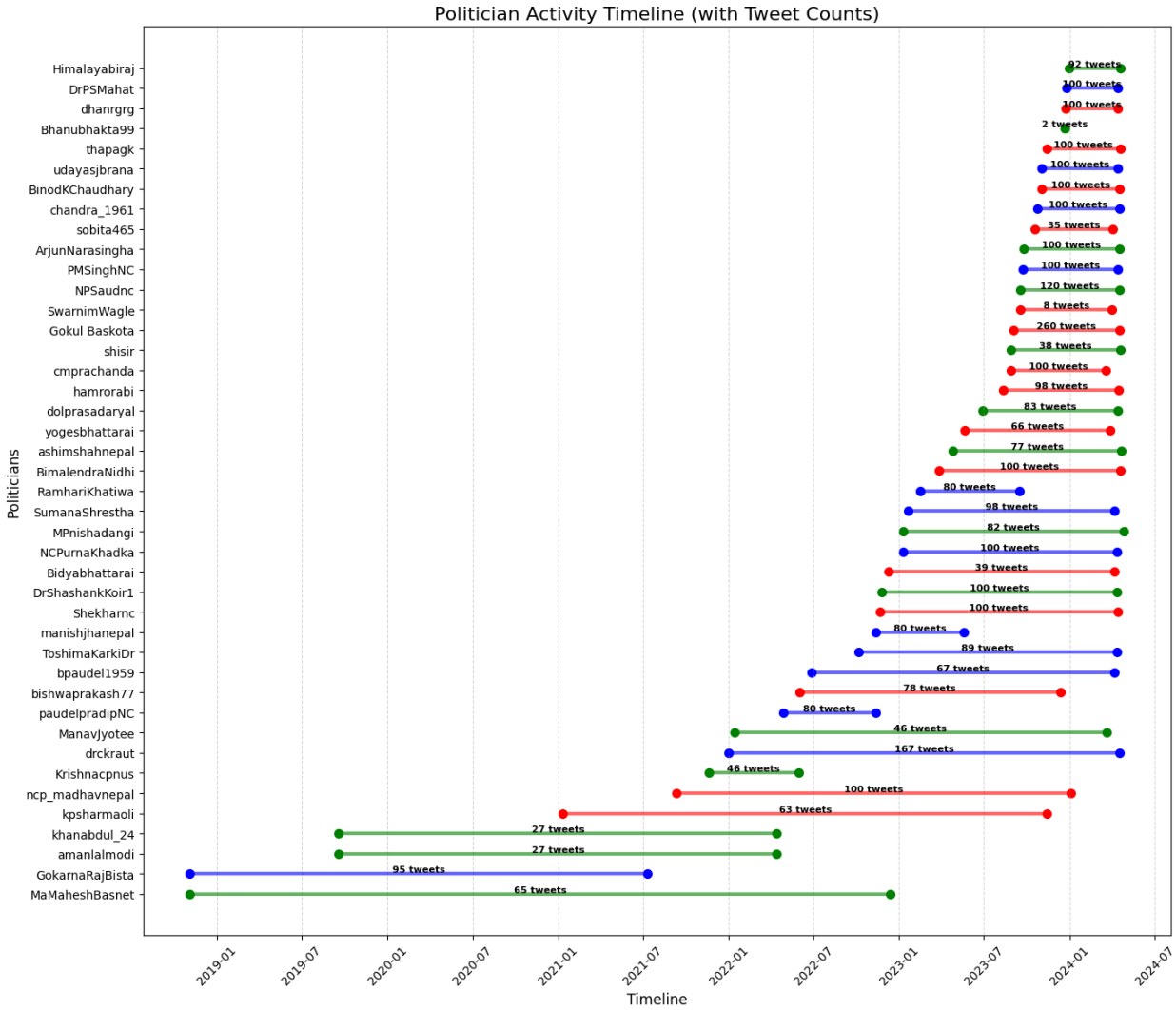
Figure 1

Political Activity Timeline (Dataset Distribution)



Note. Timeline showing activity periods and total tweet counts for various Nepali politicians from 2019 to 2024.

Justification for Temporal Filtering:

As illustrated in Figure 1, the dataset reveals a distinct pattern of activity. The vast majority of consistent political communication occurred from 2023 onwards. Prior to this date, data points were sparse and sporadic, with very few politicians maintaining active accounts. Including this historical data would introduce significant noise and skew the velocity metrics with long periods of inactivity. Therefore, restricting the analysis to the "Modern Era" (2023–Present) ensures the findings reflect current, active digital strategies rather than historical anomalies.

Step A: Matrix Generation

We computed the *Velocity Score* and *Avg Engagement Score* for every unique politician in the filtered dataset. These two metrics were used to create a single "Performance Matrix",

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ensuring that every data point represented a politician's aggregate performance over the studied period.

Step B: Correlation Testing

We applied for the Pearson Correlation Coefficient (r) to the Performance Matrix. The test was run three separate times, once for each Tier, to mathematically quantify the strength of the relationship between Velocity and Engagement.

Range: -1.0 (Negative Correlation) to +1.0 (Positive Correlation).

Step C: Visualization Configuration

To address the high variance in the dataset, we first performed a Log-Transformation of Follower Counts to inspect the population distribution. To handle the extreme variance in follower counts ranging from near zero to millions we applied a logarithmic transformation. This normalized the data to reveal the underlying population structure. Based on the distribution results, we segmented the dataset into Low, Medium, and High tiers. This allowed us to isolate and analyze distinct behavioral clusters that would be lost in an aggregate view. We generated a 1x3 grid of heatmaps (one per tier) to visualize the correlation between Tweet Frequency and Engagement, enabling a direct comparison of activity versus audience response across tiers.

Discussion and Findings

To construct a robust Engagement Score, the dataset was first examined to assess the relative value of each interaction type. The analysis revealed that high-effort engagements such as retweets and replies are significantly less frequent than passive likes, indicating a meaningful difference in user commitment across interaction types.

The findings demonstrate a clear “1:10 rule.” On average, for approximately every 9.5 likes, a politician receives only one retweet. This suggests that retweeting, which reflects endorsement and content amplification, is nearly ten times more difficult to obtain than a like, which represents passive approval. To account for this disparity, a weight of 10 was assigned to retweets in the Engagement Score calculation, ensuring that the metric reflects their relative scarcity and higher engagement value.

Replies exhibited a similar pattern of scarcity, with an approximate ratio of 1 reply for every 9.3 likes. However, unlike retweets, replies may include conversational exchanges, including instances where users respond within threaded discussions. To prevent overestimation of engagement driven by reply chains, the weight assigned to replies was capped at 5. This approach balances statistical scarcity with behavioral considerations, resulting in a more accurate and methodologically sound engagement metric. Furthermore, to determine if a "one-size-fits-all" analysis was valid, we examined the distribution of audience sizes across the dataset. The analysis revealed a massive structural inequality in digital political influence.

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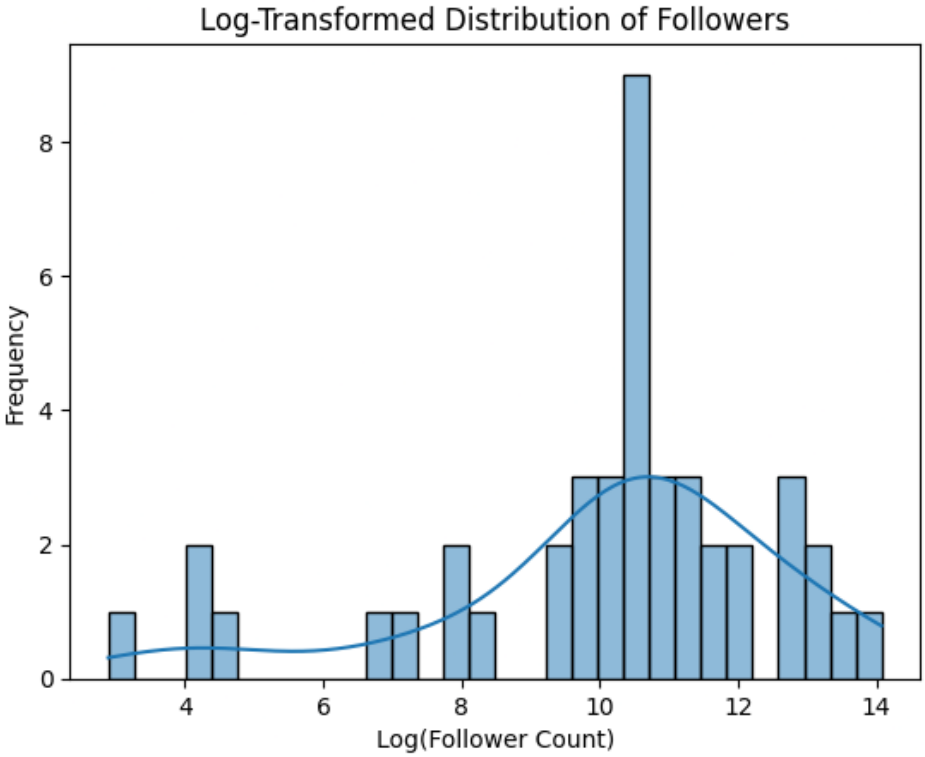
Figure 2:
Histogram of Follower Counts (Log-Scaled) showing a Bell Curve



Note. Histogram showing the distribution of follower counts, revealing most politicians share a similar range of popularity.

Strategic Decision: Segmentation by Tier

The observed distribution of follower counts confirmed that direct comparisons using raw engagement metrics would be statistically inappropriate, as it would equate politicians with vastly different audience bases. For example, comparing a leader with 200,000 followers to a local representative with 2,000 followers. To address this issue, the log-normal distribution of follower counts was used to segment the population into three comparable tiers: High, Medium, and Low. This strategic segmentation effectively isolates popularity as a confounding variable, ensuring that subsequent analyses evaluate performance relative to comparable peers rather than simply reflecting differences in existing fame. Before analyzing engagement performance, it was necessary to define the relevant temporal scope of the study. A longitudinal analysis of the full dataset (2017–Present) revealed that digital political activity in Nepal is not a static phenomenon but has undergone a radical structural shift.

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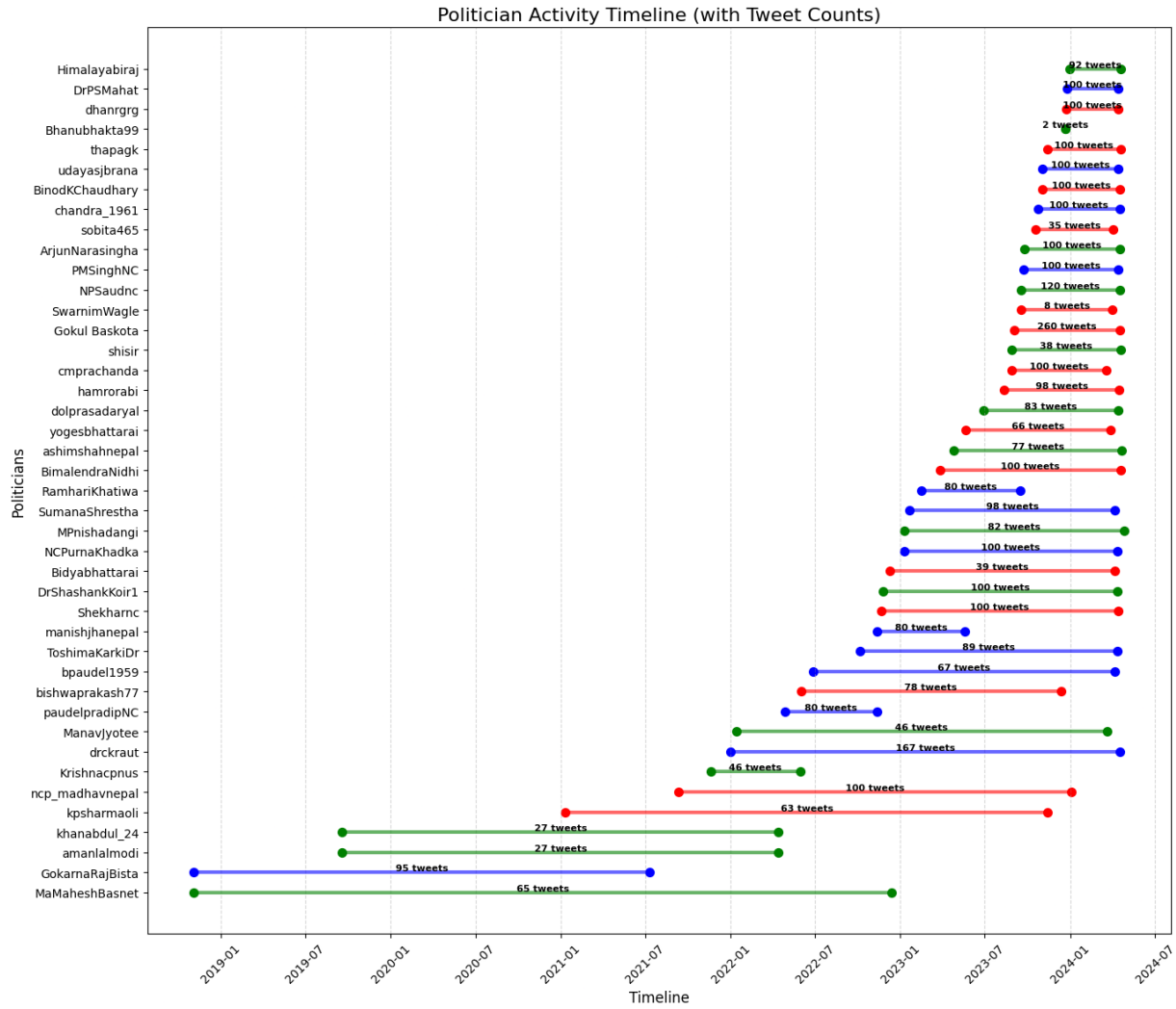
Figure 3

Line Graph showing the explosion of Tweet Volume



Note. Timeline showing activity periods and total tweet counts for various Nepali politicians from 2019 to 2024.

The "Ghost Town" Era (Pre-2023): As illustrated in Figure 3, political activity on Twitter prior to 2023 was sporadic and inconsistent. Most politicians posted irregularly, often with gaps of months between updates. Analyzing this period would introduce significant "noise," as the lack of activity was due to a lack of adoption, not a lack of strategy. A distinct inflection point is visible in early 2023. The volume of daily tweets surged and, more importantly, stabilized. This indicates a transition from ad-hoc usage to professionalized, consistent digital communication strategies. Consequently, we restricted our performance analysis to the Modern Era (Jan 1, 2023 – Present). This ensures that our "Velocity Scores" reflect current active intent rather than historical inactivity.

Furthermore, having established the modern temporal scope, we next evaluated the Posting Velocity of active politicians. This metric measures the intensity of a politician's digital strategy, specifically, how aggressively they attempt to dominate the news cycle.

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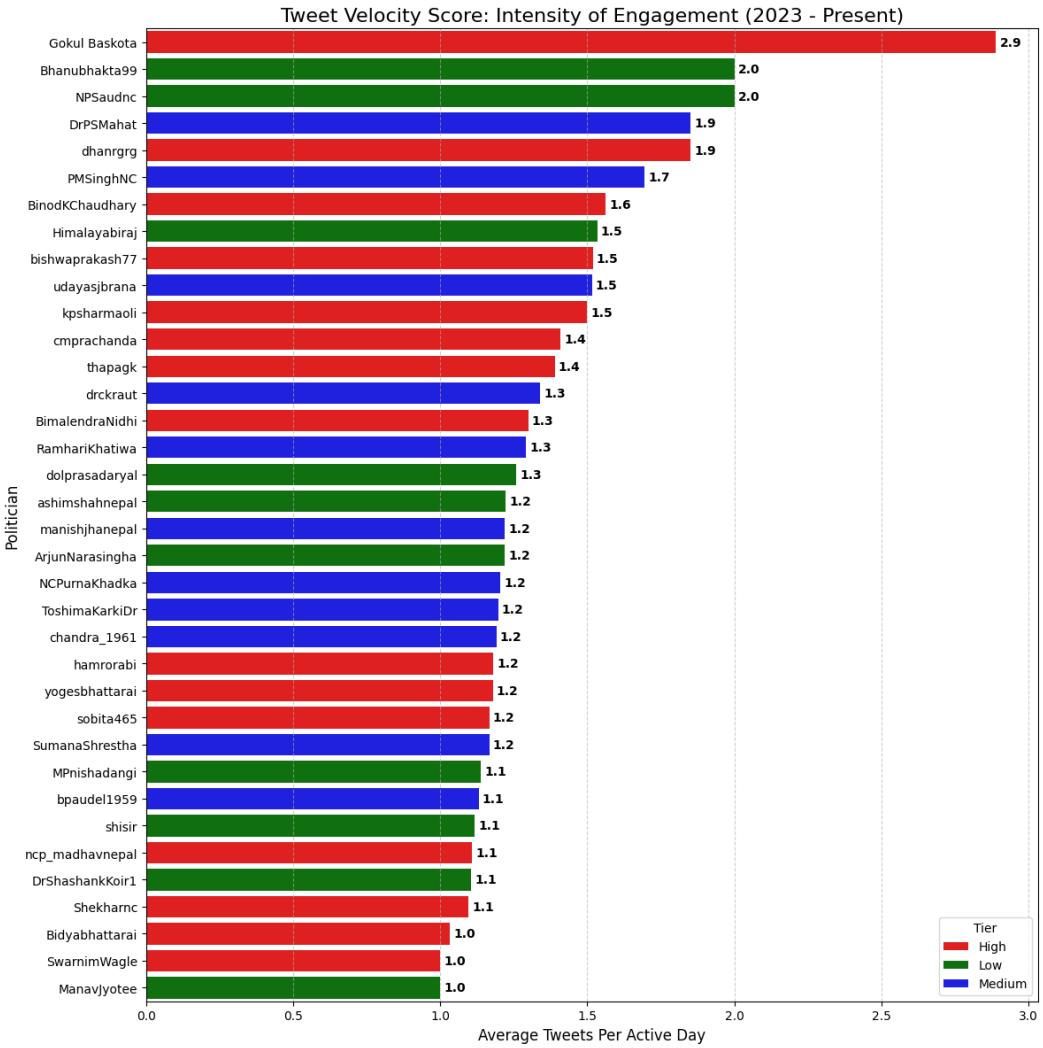
Figure 4

Bar Chart showing the Politicians by Velocity Score



Note. Bar chart ranking politicians by "Tweet Velocity," with Gokul Baskota leading in daily posting intensity (2.9 tweets/day).

The analysis revealed a wide disparity in posting behaviors. While the average politician tweets approximately 1.0 to 1.2 times per active day, a distinct cluster of "Hyper-Active" users emerged who maintain a velocity exceeding 2.0 tweets per day.

As shown in Figure 4, specific actors (such as *Gokul Baskota*) consistently top the velocity charts. These politicians appear to employ a "Flooding the Zone" strategy, attempting to maximize visibility through sheer volume of content rather than selective, high-value curation.

This finding raises the critical research question: *Does this high-intensity output translate to high-intensity audience reception?*

Quality Analysis: Who is "Heard"? (Engagement Findings)

While velocity measures effort, the Average Engagement Score measures effectiveness. By applying our weighted formula:

$$Score = (1 * Likes) + (10 * Retweets) + (5 * Replies)$$

We calculated the average impact of every single tweet to identify which politicians truly resonate with the public.

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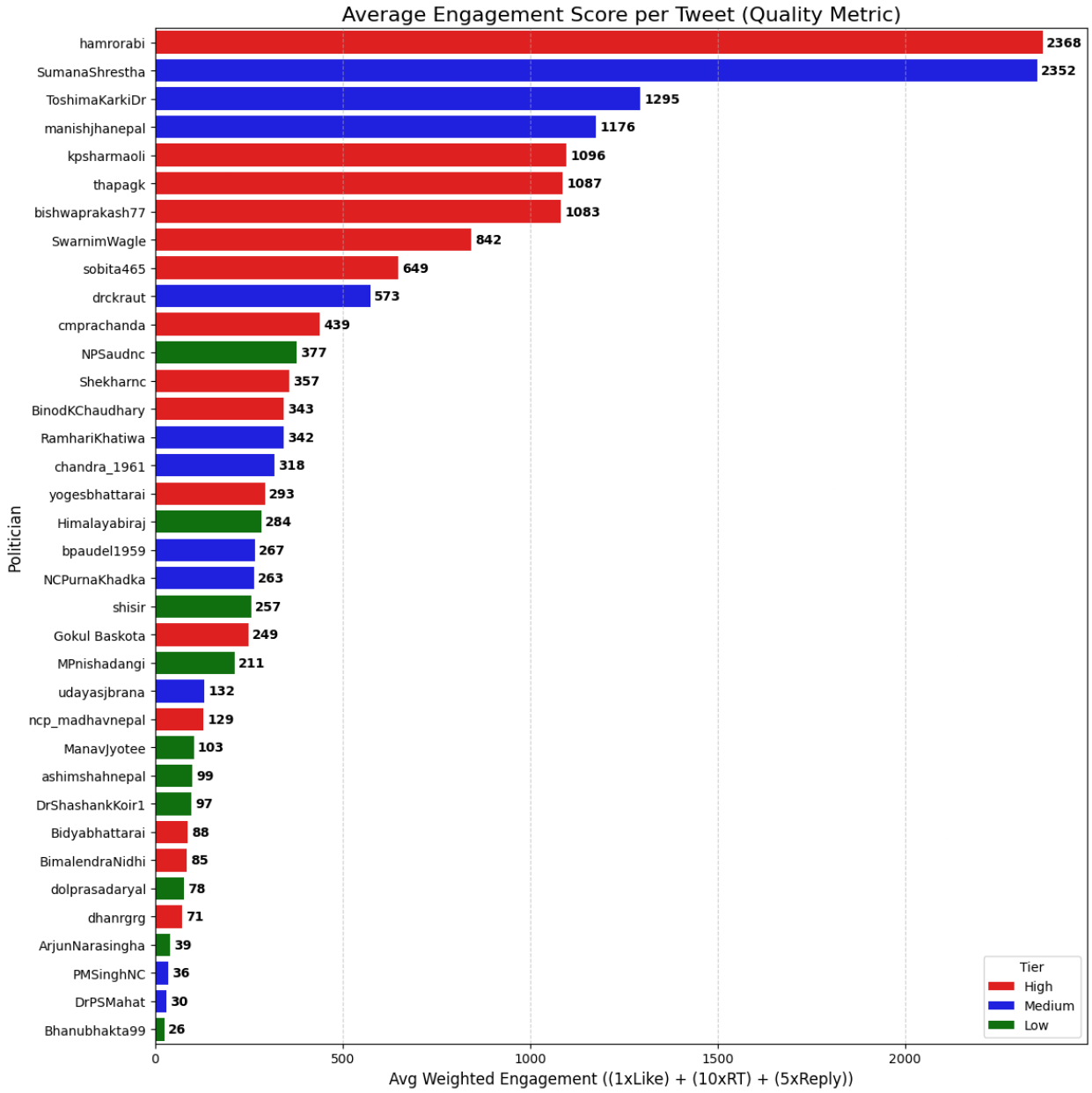
Figure 5:

Bar Chart showing the Politicians by Average Engagement Score



Note. Bar chart ranking engagement quality. Rabi Lamichhane and Sumana Shrestha lead, getting the most reactions for every single tweet.

The "New Wave" Dominance:

As shown in Figure 5 above, the engagement landscape is dominated by newer political figures rather than traditional party establishment. Leaders like *Rabi Lamichhane* and *Sumana Shrestha* top the quality charts, consistently generating scores that are 2x to 3x higher than the average High-Tier politician. This suggests that their audience is highly mobilized and prone to high-effort actions (Retweeting).

The "Efficiency Gap" (Quantity ≠ Quality)

A cross-comparison with the Velocity findings reveals a stark "Efficiency Gap." The politician with the highest posting velocity (*Gokul Baskota*, ~2.9 tweets/day) does not appear in

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the Top 5 for Engagement Quality. Conversely, the leaders in Engagement Quality often maintain a moderate velocity (~1.0–1.5 tweets/day).

Strategic Implication

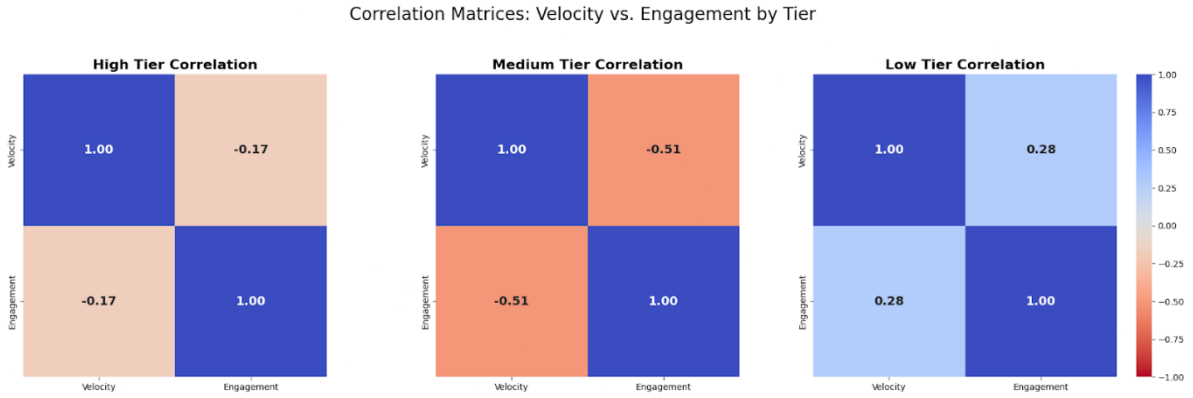
This inverse relationship implies a "Diminishing Returns" effect. Politicians who "flood the zone" (High Velocity) often see a dilution in per-tweet engagement, while those who post selectively tend to maintain higher audience excitement per interaction.

The Final Verdict: Correlation Analysis (Velocity vs. Quality)

To answer the core research question *"Does tweeting more lead to higher audience engagement?"* We performed a Pearson Correlation analysis across the three tiers. The results disprove the common assumption that "more content equals more influence."

Figure 6:

Correlation Heatmaps (1x3 Grid) showing the R-values for each Tier



Note. Correlation matrices reveal that posting more frequently negatively affects engagement for medium-tier politicians, while slightly helping low-tier ones.

The correlation coefficients (r) reveal distinct behaviors for each demographic:

For the High Tier group (r = -0.17), the analysis indicates the presence of a saturation point. The verdict shows no significant correlation between posting frequency and engagement quality. This suggests that, within this tier, increasing or decreasing the number of posts does not meaningfully affect the level of audience interaction per tweet. For established national leaders, posting frequency has almost no impact on engagement quality. Their audience is "fixed." Whether they tweet once a week or three times a day, the engagement per tweet remains relatively static. They have reached brand saturation where "flooding the zone" yields no additional benefit.

For the Medium Tier group (r = -0.51), the findings indicate a moderate negative correlation, described as the “Spam” penalty. The verdict demonstrates that as posting frequency increases, engagement quality tends to decline, reflecting a measurable inverse relationship between velocity and audience response. This is the most critical finding. For "Rising Star" politicians, there is a clear penalty for over-posting. As velocity increases, average engagement significantly drops. This suggests that their audience is sensitive to content quality; when these politicians prioritize quantity (velocity), they likely dilute their message, causing audience fatigue. For this group, silence is golden, less is more.

For the Low Tier group (r = +0.28), the findings indicate a weak positive correlation, suggesting that increased posting speed provides a modest advantage. Unlike elite groups, the “Long Tail” of micro-influencers experiences a slight benefit from higher activity levels.

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Because they lack an established and stable audience base, they must post more frequently to trigger algorithmic visibility and remain present in users' feeds. For this group, the risk of being perceived as "spamming" is comparatively lower than the risk of remaining invisible.

The negative correlation in the Medium Tier and the lack of correlation in the High Tier lead to a definitive conclusion, Digital political influence in Nepal cannot be "brute-forced" through high-volume posting. While frequency helps smaller accounts gain initial visibility, it quickly yields diminishing returns and even penalties as a politician's influence grows.

Key Findings

This study analyzed the Twitter activity of 42 prominent Nepali politicians from January 1, 2023, to present, segmenting them into High, Medium, and Low tiers based on audience size. By correlating "Velocity" (tweets per day) with "Quality" (weighted engagement per tweet), we uncovered several counter-intuitive insights about digital political influence in Nepal. Contrary to the popular belief that "flooding the zone" with content guarantees visibility, our data proves that for established politicians, excessive posting yields diminishing returns. The strongest negative correlation ($r = -0.51$) was found in the "Medium Tier" (Rising Stars). As these politicians increased their tweet frequency, their average engagement per tweet dropped significantly. This indicates that their audience is highly sensitive to content quality, when they prioritize quantity, they dilute their message and lose audience attention. For elite leaders (like *KP Sharma Oli* or *Gagan Thapa*), the correlation was effectively zero ($r = -0.17$). Their audience is "fixed" and loyal; tweeting more does not expand their reach, nor does tweeting less hurt it. They have reached a saturation point where brand power outweighs algorithmic activity.

A direct comparison of "Effort vs. Impact" revealed a massive efficiency gap between traditional party leaders and the "New Wave" of politicians. The politician with the highest velocity, *Gokul Baskota* (~2.9 tweets/day), did not even rank in the Top 10 for engagement quality. His strategy relies on sheer volume. The leaders in quality, Rabi *Lamichhane* and *Sumana Shrestha* generated 2x to 3x higher engagement scores than the average High-Tier politician, despite tweeting significantly less (~1.2 tweets/day). This proves that the Nepali digital electorate rewards high-value, sporadic content over constant low-value updates. The "Efficiency Gap" suggests that newer parties (like RSP) have a more digitally native understanding of "content curation" than traditional parties (UML/Congress).

Our metric valuation analysis established a definitive "Exchange Rate" for political support in Nepal. The data shows that for every 9.5 Likes, a politician receives only 1 Retweet. This confirms that "Endorsement" (Retweeting) is a scarce commodity. It is 10x harder to get a user to share a message than to simply "like" it. This justifies why "vanity metrics" (Likes) are poor indicators of true political mobilization compared to "amplification metrics" (Retweets).

The only group that benefited from "spamming" was the Low Tier (Micro-Influencers). With a weak positive correlation ($r = +0.28$), this was the only group where tweeting more helped. Because these politicians lack an established follower base, they are dependent on the algorithm for discovery. For them, "silence is death." They *must* maintain high velocity to be seen, whereas established leaders can afford to be selective.

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Conclusion

This study disproves the efficacy of "flooding the zone," revealing that high posting frequency significantly reduces engagement for rising politicians (r=-0.51) while failing to impact elite leaders. While micro-influencers benefit slightly from high activity, established figures face a "Quality Trap" where excessive volume yields diminishing returns. Ultimately, the data confirms that genuine political mobilization in Nepal relies on content quality rather than quantity.

References

[1]. Alcántara-Lizárraga, J. Á., & Jima-González, A. (2024). Digital manipulation and mass mobilization over the long run: Evidence from Latin America. Frontiers in Political Science, 6, Article 1296004. https://doi.org/10.3389/fpos.2024.1296004

[2]. Angelova, D. (2025). Breaking down the walls: Redefining populism in the age of algorithms. Piron, 2(6). https://piron.culturecenter-su.org/wp-content/uploads/2025/04/Desislava-Angelova-Breaking-Down-the-Walls.pdf

[3]. Angelova, D. (2025). Role of echo chambers in the polarization of society. *Athens Journal of Political Science, 12*(1), 65–82. https://www.athensjournals.gr/politics/2025-1-4-4-Angelova.pdf

[4]. Bhattarai, P. (2023). The use of social media for political socialization in Nepal: An Effectiveness Analysis of platforms. *The Outlook Journal of English Studies, 14*, 46–59. https://doi.org/10.3126/ojes.v14i1.56656

[5]. Bond, R. M., Fariss, C. J., Jones, J. J., Kramer, A. D. I., Marlow, C., Settle, J. E., & Fowler, J. H. (2012). A 61-million-person experiment in social influence and political mobilization. *Nature*, 489(7415), 295–298. https://doi.org/10.1038/nature11421

[6]. Boulianne, S. (2015). Social media use and participation: A meta-analysis of current research. *Information, Communication & Society*, 18(5), 524–538. https://doi.org/10.1080/1369118X.2015.1008542

[7]. CIRCLE (Center for Information & Research on Civic Learning and Engagement). (2018, October 15). *So much for "slacktivism": Youth translate online engagement to offline political action*. Tufts University. https://circle.tufts.edu/latest-research/so-much-slacktivism-youth-translate-online-engagement-offline-political-action

[8]. Eldridge II, S. A., García-Carretero, L., & Broersma, M. (2019). Disintermediation in social networks: Conceptualizing political actors' construction of publics on Twitter. *Media and Communication, 7*(1), 72–82. https://doi.org/10.17645/mac.v7i1.1825

[9]. Enikolopov, R., Makarin, A., & Petrova, M. (2020). Social media and protest participation: Evidence from Russia. Econometrica, 88(4), 1479–1514. https://doi.org/10.3982/ECTA14262

[10]. Fujiwara, T., Müller, K., & Schwarz, C. (2024). The effect of social media on elections: Evidence from the United States. *Journal of the European Economic Association*, 22(3), 1495–1539. https://doi.org/10.1093/jeea/jvad048

[11]. Galais, C., & Anduiza, E. (2016). The slacktivism crossroad: Causal relationships between online and offline political participation. In *OIDP Proceedings*. https://www.oidp.net/docs/repo/doc38.pdf

[12]. Guess, A. M., Nyhan, B., & Reifler, J. (2023). A systematic review of worldwide causal and correlational evidence on digital media and democracy. *Science Advances*. https://pmc.ncbi.nlm.nih.gov/articles/PMC9883171/

[13]. Himelboim, I., Lariscy, R. W., Tinkham, S. F., & Sweetser, K. D. (2012). Social media and online political communication: The role of interpersonal informational trust and openness. Journal of Broadcasting & Electronic Media, 56(1), 92–115. https://doi.org/10.1080/08838151.2011.648682

[14]. Jiang, J., Chen, Y., Ling, M., & Li, Y. (2021). Social media polarization and echo chambers in the context of COVID-19: Case study. *Journal of Medical Internet Research, 23*(8), Article e29570. https://xmed.jmir.org/2021/3/e29570

[15]. Kharel, A. B. (2024). Cyber-Politics: Social media's influence on political mobilization. *Journal of Political Science*, 103–115. https://doi.org/10.3126/jps.v24i1.62857

[16]. Lariscy, R. W., Sweetser, K. D., & Brown, K. A. (2013). Bypassing the gatekeepers? A revised model of disintermediation and political communication on social media. Journal of Public Relations Research. (Note: Year approximated from source; verify via DOI if available). https://9pdf.org/article/bypassing-gatekeepers-revised-model-disintermediation.yd7xe93e

[17]. Steinert-Threlkeld, Z. C. (2017). Spontaneous collective action: Peripheral mobilization during the Arab Spring. *American Political Science Review*, 111(2), 379–403. https://doi.org/10.1017/S0003055416000769

[18]. Neupane, S. S., Shakya, A., Rokka, B., & Acharya, S. (2024). Comparing Political Inclination Classification on Twitter Posts using Naive Bayes, SVM, and XGBoost. *International Journal of Computer Applications Technology and Research*, 13(10), 62–65. https://doi.org/10.7753/ijcatr1310.1005

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