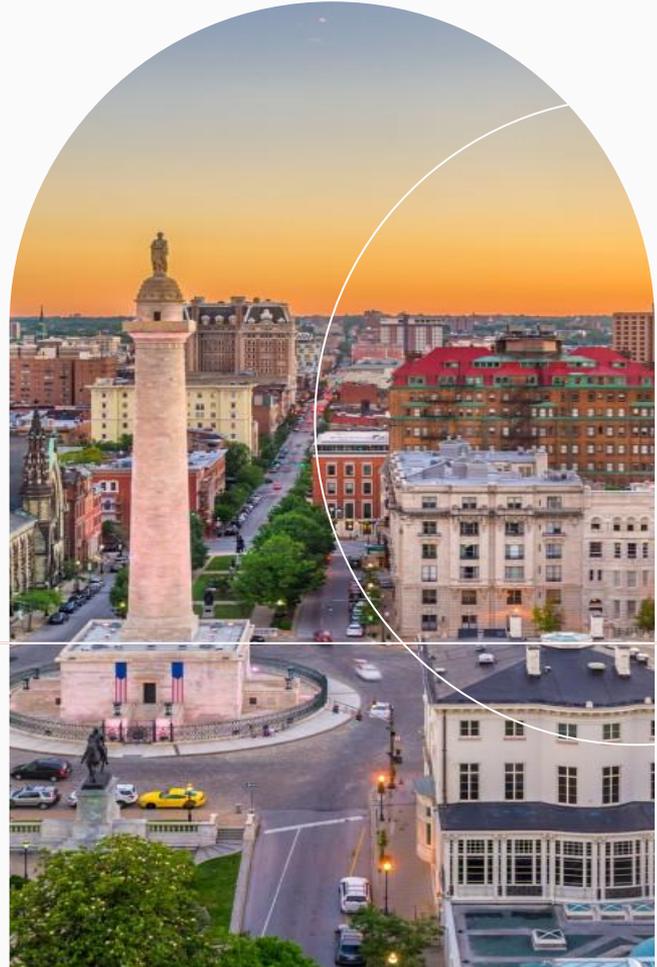


Engagement Analysis of Baltimore Newsrooms' TikToks

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VIPS: Digital Engagement Lab,
Final Presentation



Agenda

DECEMBER 2025



- 01 Introduction
- 02 Research Question
- 03 Methodology
- 04 Analysis and Limitations
- 05 Findings
- 06 Discussion

- News organizations increasingly rely on social media platforms such as TikTok to distribute content, reach younger audiences, and drive engagement.
- This analysis compares the TikTok engagement dynamics of two major Baltimore newsrooms — **The Baltimore Sun and Baltimore Banner**
 - Uses data from 2022, when both accounts started posting, to 2025
- The Baltimore Sun is a legacy newsroom that was founded nearly 200 years ago, while The Baltimore Banner was launched in 2022 and has generally taken a less traditional approach to news dissemination
 - The Sun has a print newspaper while The Banner is fully digital
 - Still, The Banner won a Pulitzer last year and has a reputation of producing well-respected journalism



Introduction

DECEMBER 2025



baltimorebanner The Baltimore Banner

Follow Message

122 Following 90.3K Followers 2.1M Likes

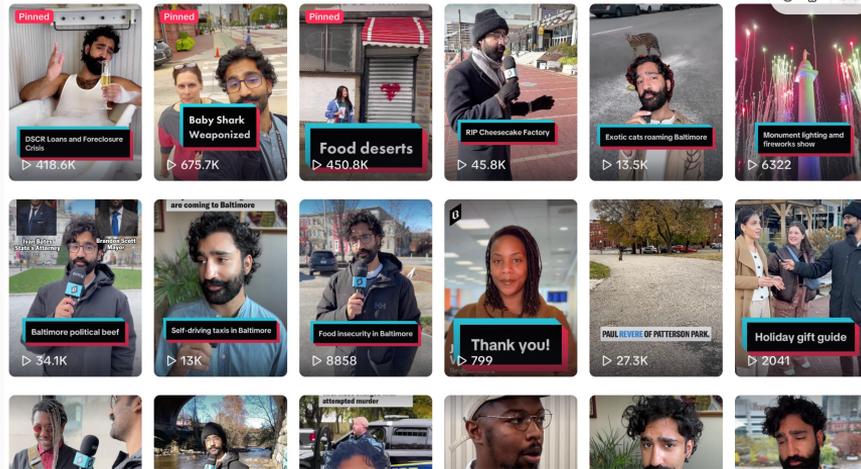
Nonprofit. Local news. We report stories that make Baltimore & Maryland better.

linkin.bio/baltimorebanner play.google.com/store/apps/...

Videos Reposts Liked

Latest Popular Oldest

Videos



Grid of video thumbnails for baltimorebanner. The first row includes: 'DCBR Loans and Foreclosure Crisis' (418.6K), 'Baby Shark Weaponized' (675.7K), 'Food deserts' (450.8K), 'RP Cheesecake Factory' (45.8K), 'Exotic cats roaming Baltimore' (13.5K), and 'Monument lighting and fireworks show' (6322). The second row includes: 'Baltimore political beef' (34.1K), 'Self-driving taxis in Baltimore' (13K), 'Food insecurity in Baltimore' (8858), 'Thank you!' (799), 'PAUL BEVERE OF PATTERSON PARK' (27.3K), and 'Holiday gift guide' (2041). The third row shows several smaller thumbnails, including one labeled 'attempted murder'.



baltimoresun Baltimore Sun

Follow Message

46 Following 22.1K Followers 675.4K Likes

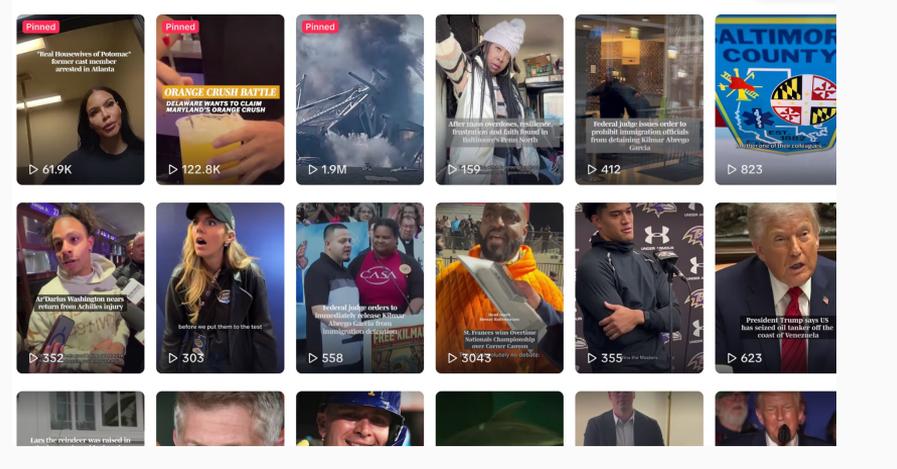
Lining your tables for crab feasts since 1873.

www.baltimoresun.com play.google.com/store/apps/...

Videos Liked

Latest Popular Oldest

Videos



Grid of video thumbnails for baltimoresun. The first row includes: '3rd Housemembers of Podesta* former cast member arrested in Idaho' (61.9K), 'ORANGE CRUSH BATTLE: DELAWARE WANTS TO CLAIM MARYLAND'S ORANGE CRUSH' (122.8K), '1.9M', 'After 1000 arrests, 2000 people freed and 6000 sent to Baltimore's prison' (159), 'Federal judge issues order to prohibit immigration officials from detaining Aimer Abergan' (412), and 'ALTIMORE COUNTY' (823). The second row includes: 'As 'Delaware Washington' man returns from Achilles injury' (352), 'before we just thank to the best' (303), 'Federal judge orders to immediately release 1000+ Aimer Abergan' (558), 'St. Francis wins Divisional Nationals Championship' (3043), '355', and 'President Trump says US has seized oil tanker off the coast of Venezuela' (623). The third row shows several smaller thumbnails, including one labeled 'Lies the retailer was involved in'.

Research Question

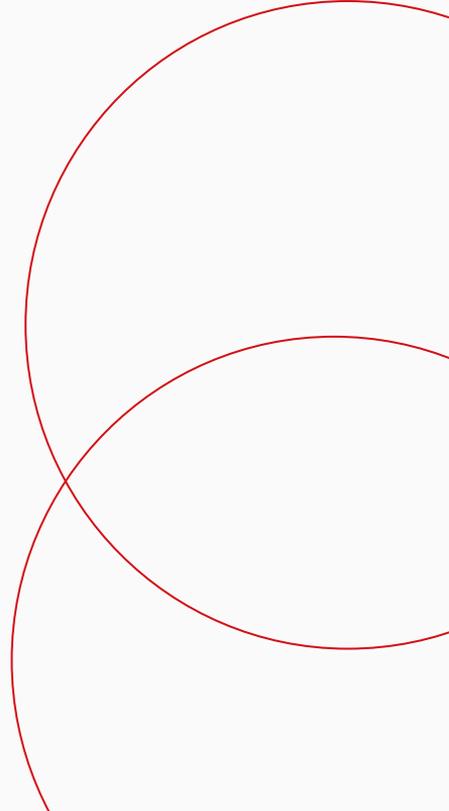
DECEMBER 2025

What factors predict TikTok video views for the Baltimore Sun and Baltimore Banner, and how do these predictors differ between the two newsrooms?



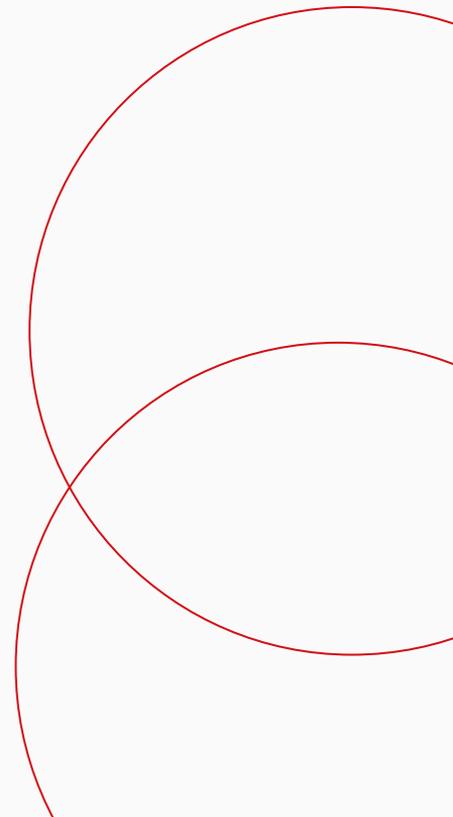
Scraped 1000+ videos from the two accounts using TikTok API

- Collected videos and then cleaned data
- Removed duplicate videos based on their unique video ID
- Converted timestamps to numeric values to model trends over time
- Counted hashtags by parsing the TikTok hashtag_names field
- Coerced all engagement fields to numeric
- Log-transformed the dependent variable, $\log_views = \log(\text{view_count} + 1)$, to reduce skew and stabilize variance



Fields collected with the API

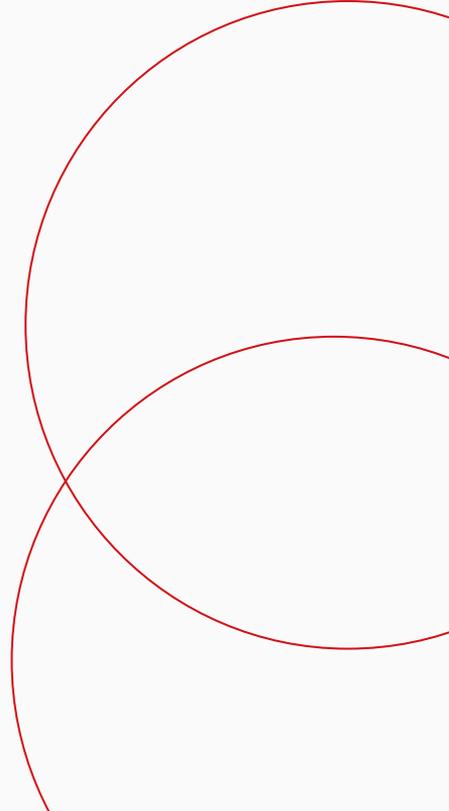
- id (unique identifier for each video)
- create_time
- username
- region_code (all US)
- like_count
- comment_count
- share_count
- favorites_count
- video_description
- voice_to_text
- video_duration
- hashtag_names
- music_id (background sound)
- effect_ids
- video_mention_list
- video_label
- playlist_id
- is_stem_verified
- create_datetime_utc (ex: 2025-12-07T20:30:20+00:00)
- create_date_only (ex: 2025-12-07)



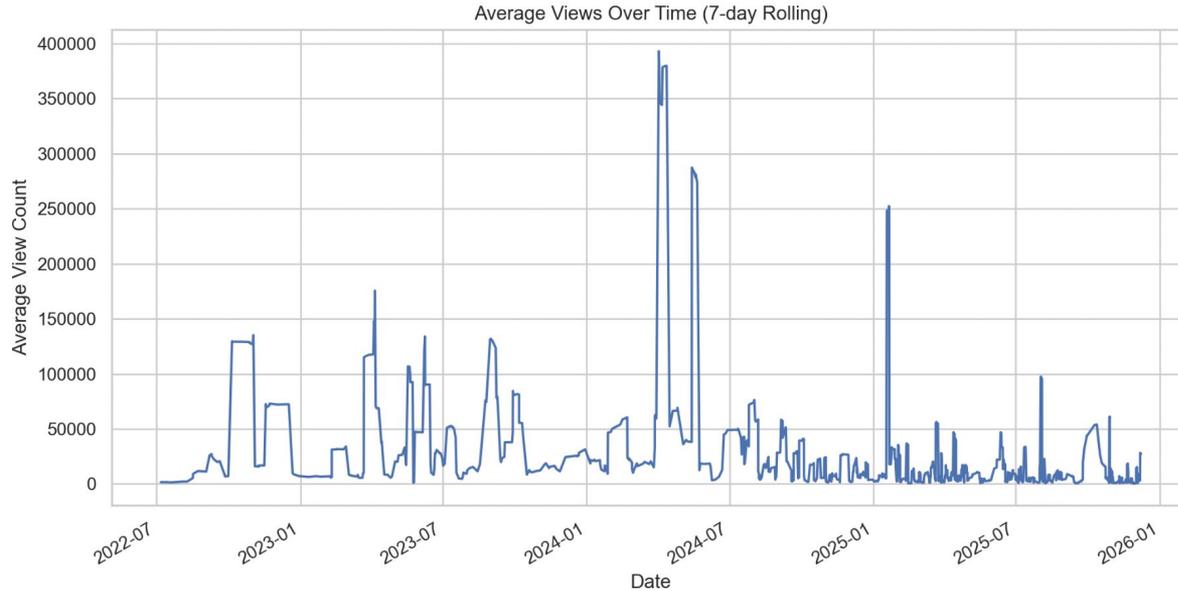
Fields relevant to our analysis

- **id (unique identifier for each video)**
- create_time
- **username**
- region_code (all US)
- **like_count**
- **comment_count**
- **share_count**
- **favorites_count**
- video_description
- voice_to_text
- **video_duration**
- **hashtag_names**
- music_id (background sound)
- effect_ids
- video_mention_list
- video_label
- playlist_id
- is_stem_verified
- **create_datetime_utc (ex: 2025-12-07T20:30:20+00:00)**
- **create_date_only (ex: 2025-12-07)**

*Video effects, video label, and music ID were not included because both publication rarely used them, if ever

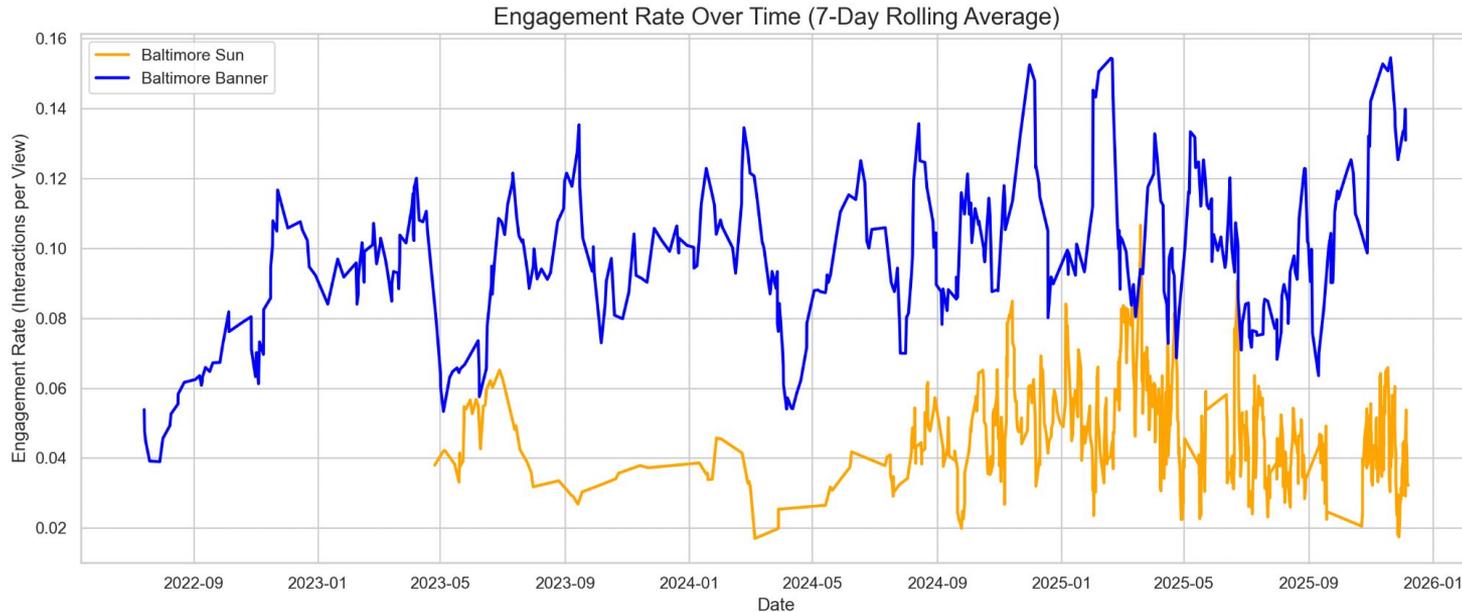


Average views over time for both newsrooms:



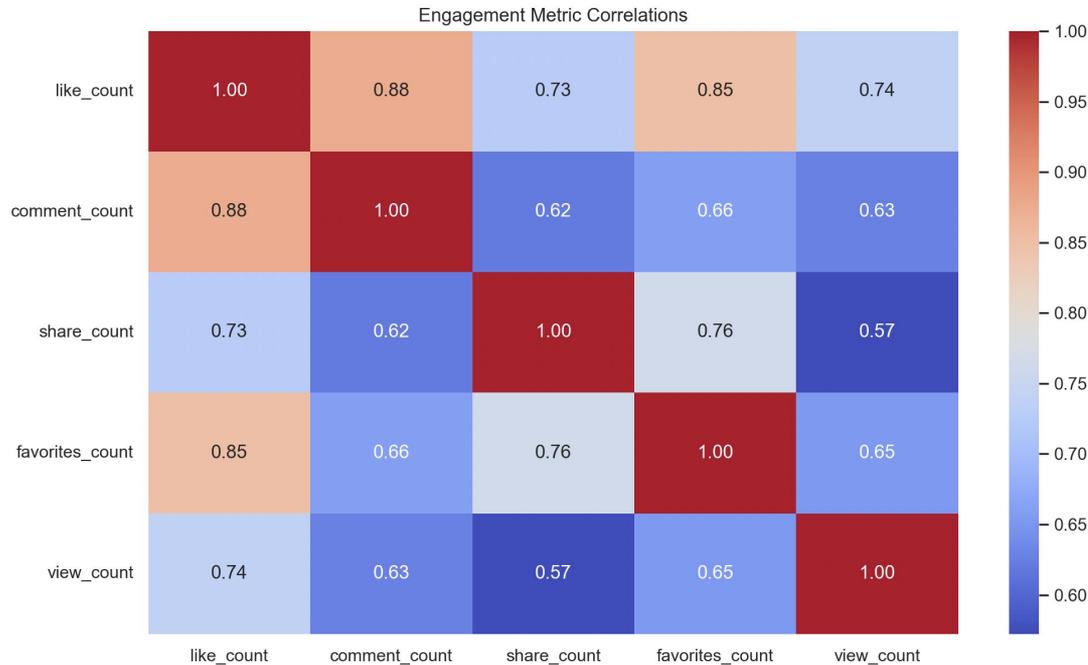
Key Bridge collapse marked high viewership for both accounts

The Baltimore Banner has consistently had higher engagement rates than the Baltimore Sun



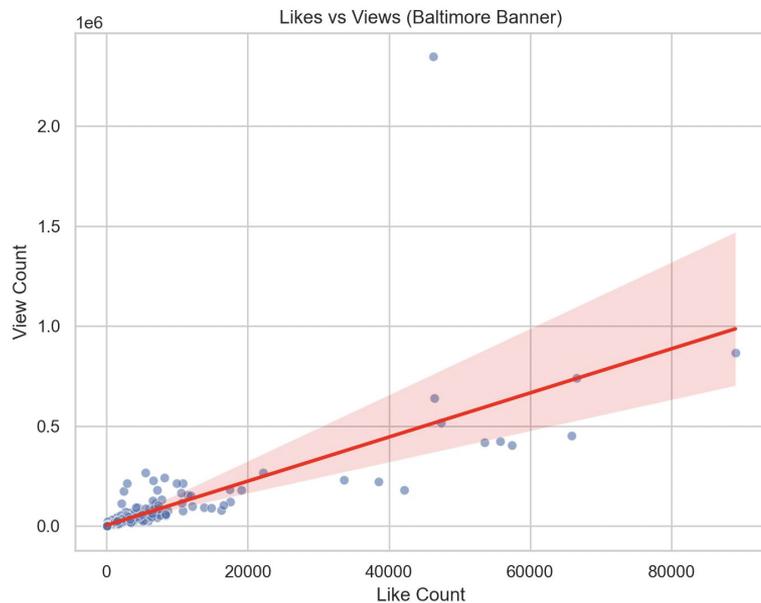
The engagement rate measures the number of interactions (likes, saves, shares, comments) per video

Findings

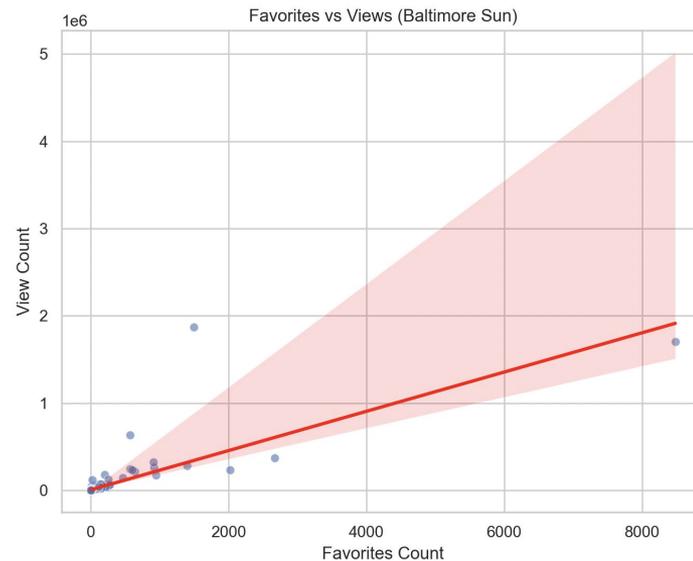


Across both accounts, likes, comments, shares, and saves all correlate strongly with each other. View count correlates most strongly with likes ($r \approx 0.74$) and favorites ($r \approx 0.65$ – 0.79)

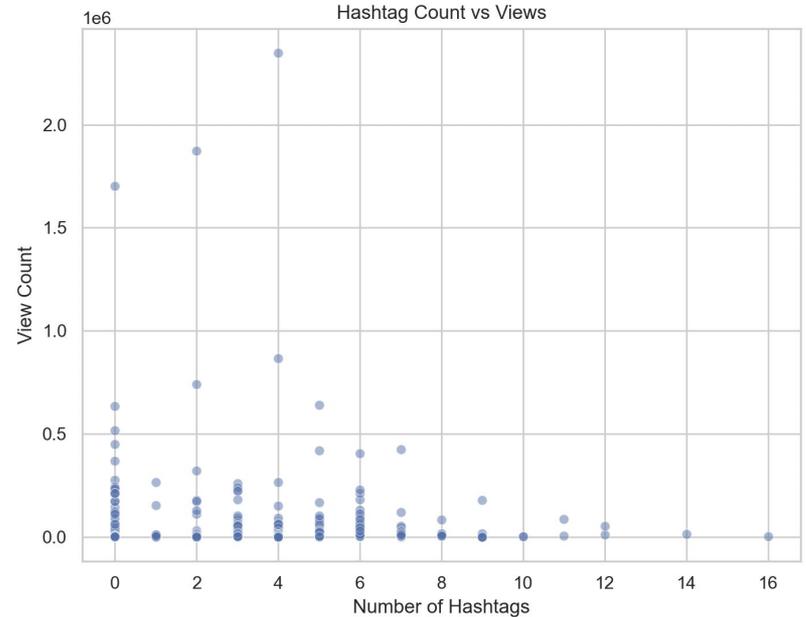
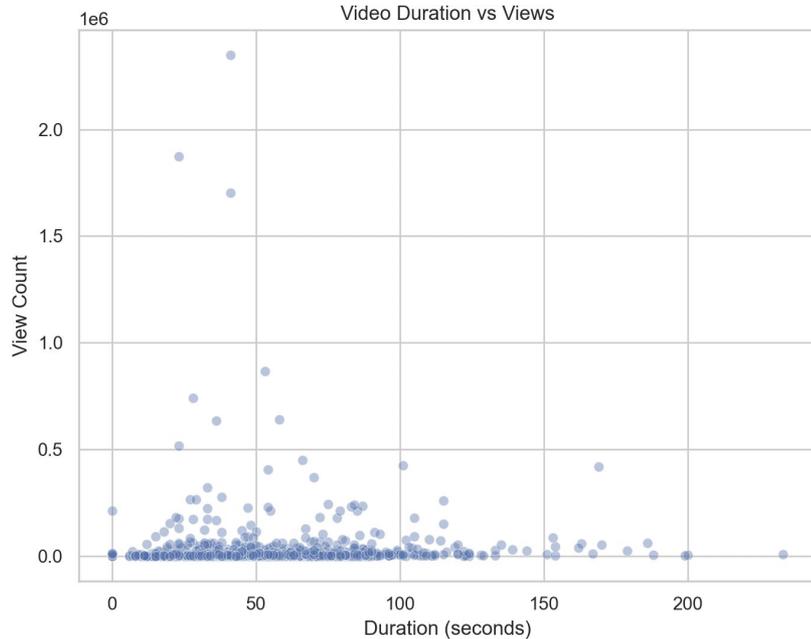
The Banner's strongest predictor of views was the like count on its videos



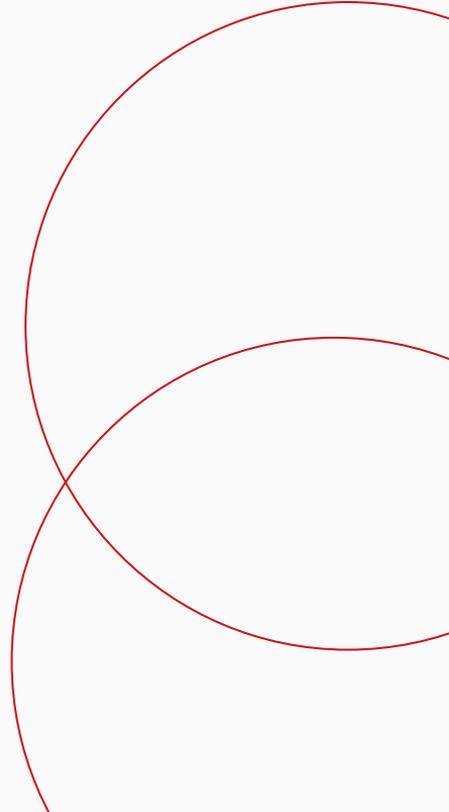
The Sun's strongest predictor of views was the favorite count



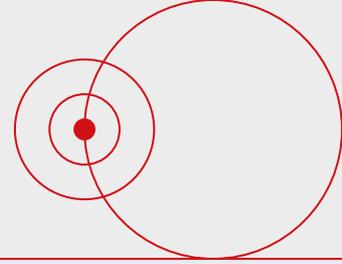
Hashtag count and video duration did not have a significant effect for either publication's engagement



- Rate limits from the API
 - ◆ To solve: backward-moving window, querying videos in sequential 7-day intervals moving from the present day back to January 2022 (when both started posting)
- Determining what fields to include in analysis
 - ◆ Looked through the data and determined that music/effects did not significantly contribute, so did not include
- Engagement metrics vary widely (views can range from a few hundred to hundreds of thousand)
 - ◆ To solve: Log-transformed the dependent variable, $\log_views = \log(\text{view_count} + 1)$, to reduce skew and stabilize variance



Discussion



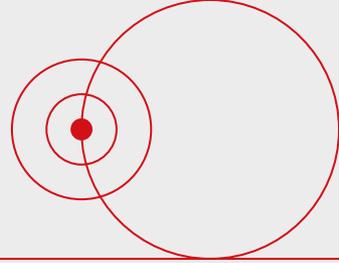
Why is the Banner outperforming the Sun?

- The Banner has a more intentional social media strategy
 - Use consistent people to act as “the face” of the news that’s being shared (audience engagement editor)
 - Translate news articles into information that works on TikTok rather than making the articles into the video
- The Sun posts more frequently, but from this research, that doesn’t meaningfully impact the number of view or engagement

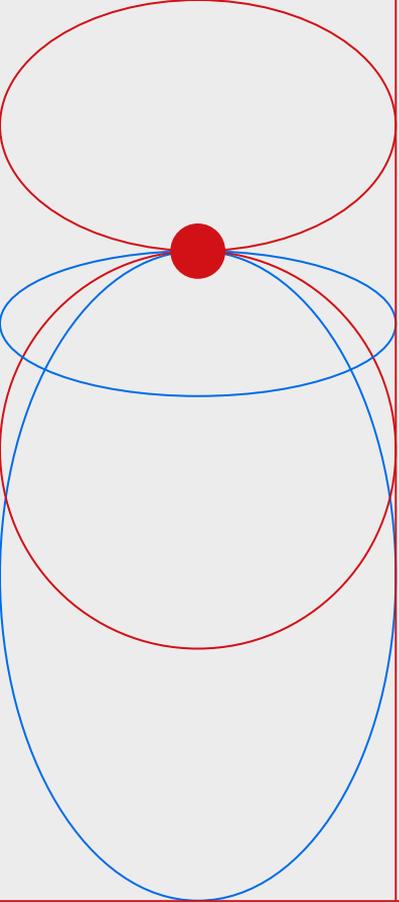
Limitations

- It’s difficult to pinpoint a specific metric that contributes to a video with high engagement, because TikTok has a complicated algorithm with many different factors
- Important to consider that these newsrooms still have to remain factually accurate, and can’t post the kinds of TikTok videos that may easily go viral

Future Research



- Look into other newsrooms around the country with similar dynamics to the Banner and the Sun, or two newsrooms that cover the same topics
 - The Detroit News and the Detroit Free Press, for example
- Do sentiment analysis on these TikTok videos
- Analyze the factual accuracy/potential for misinformation on these TikTok videos
- Employ a new social media strategy for a newsroom like the Baltimore Sun, then perform analysis again to see its success



*Thank
you*