

TikTok Video Popularity Analysis : What Makes TikTok Videos Go Viral?

★ Motivation

TikTok is no longer just entertainment

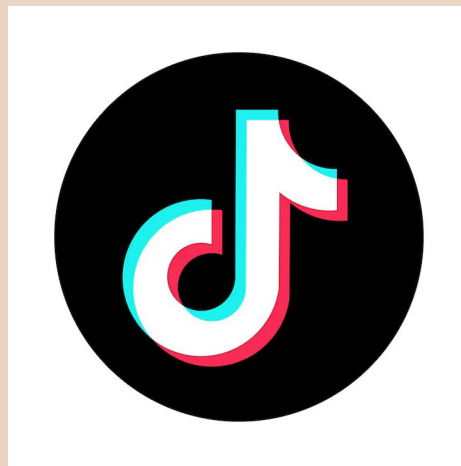
- Known for short, viral, and creative videos
- Increasingly used for **news, education and current events**

Why this matters

- Many users now rely on TikTok to stay informed
- The platform plays a growing role in shaping opinions and knowledge

Our curiosity

- Do people engage with informational content the same way they engage with entertainment?
- Does TikTok reward one type of content more than the other?



★ Research Question

Main question

- What drives video popularity and engagement on TikTok?

Key factors we examine

- Posting frequency
- Hashtag use
- Music choice
- Video length
- Follower count

Content comparison

- Entertainment-focused videos
- Informational / news-related videos

Goal

- Understand how different content types perform
- Identify patterns in how users interact with TikTok videos

★ Background : What we know so far ?

What prior research shows

- Engagement depends on multiple factors, not just follower count
- Creator behavior, content type, and audience dynamics all matter

Why TikTok is unique

- The *For You Page* algorithm can boost small or new creators
- Videos can go viral very quickly
- Engagement is not evenly distributed

Why this platform is interesting

- Popularity isn't tied only to being famous
- Raises questions about whether informational content can succeed as much as entertainment

★ Data

1. Top 250 TikTok Creators

- Dataset: `top-250-tiktokers.csv`
- Focus: **demographics and characteristics of top influencers**
- Collected using:
 - Web scraping with **Python (BeautifulSoup)** from InfluenceGrid
 - Manual data entry from **Famous Birthdays** and **TikTok** for missing demographic details
- Used to analyze:
 - Age, gender, verification status
 - Follower counts and engagement patterns among top creators

2. Sample of 1,000 TikTok User Profiles

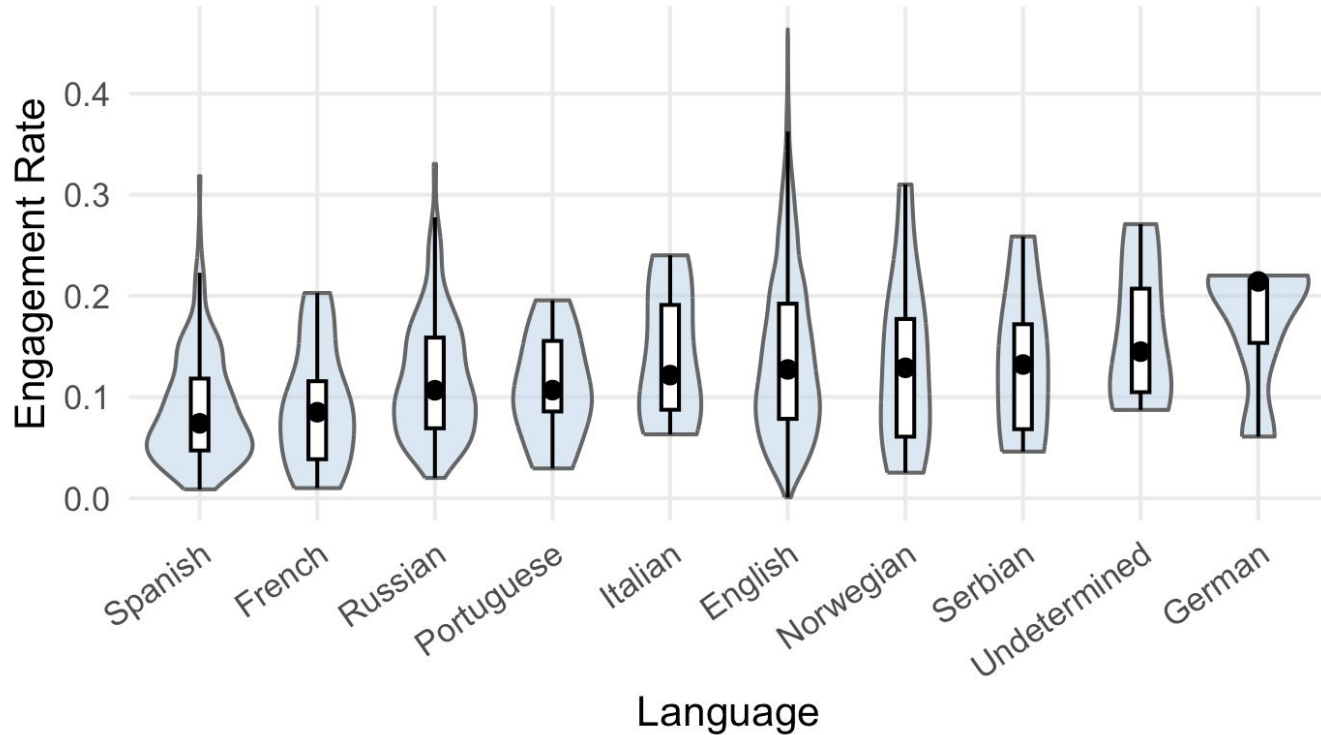
- Source: Bright Data
- Focus: **broader creator engagement patterns**
- Includes:
 - Public profile information
 - Follower counts and engagement metrics
- Used to study:
 - Posting frequency
 - Engagement rates
 - Differences between smaller and larger creators

Data notes

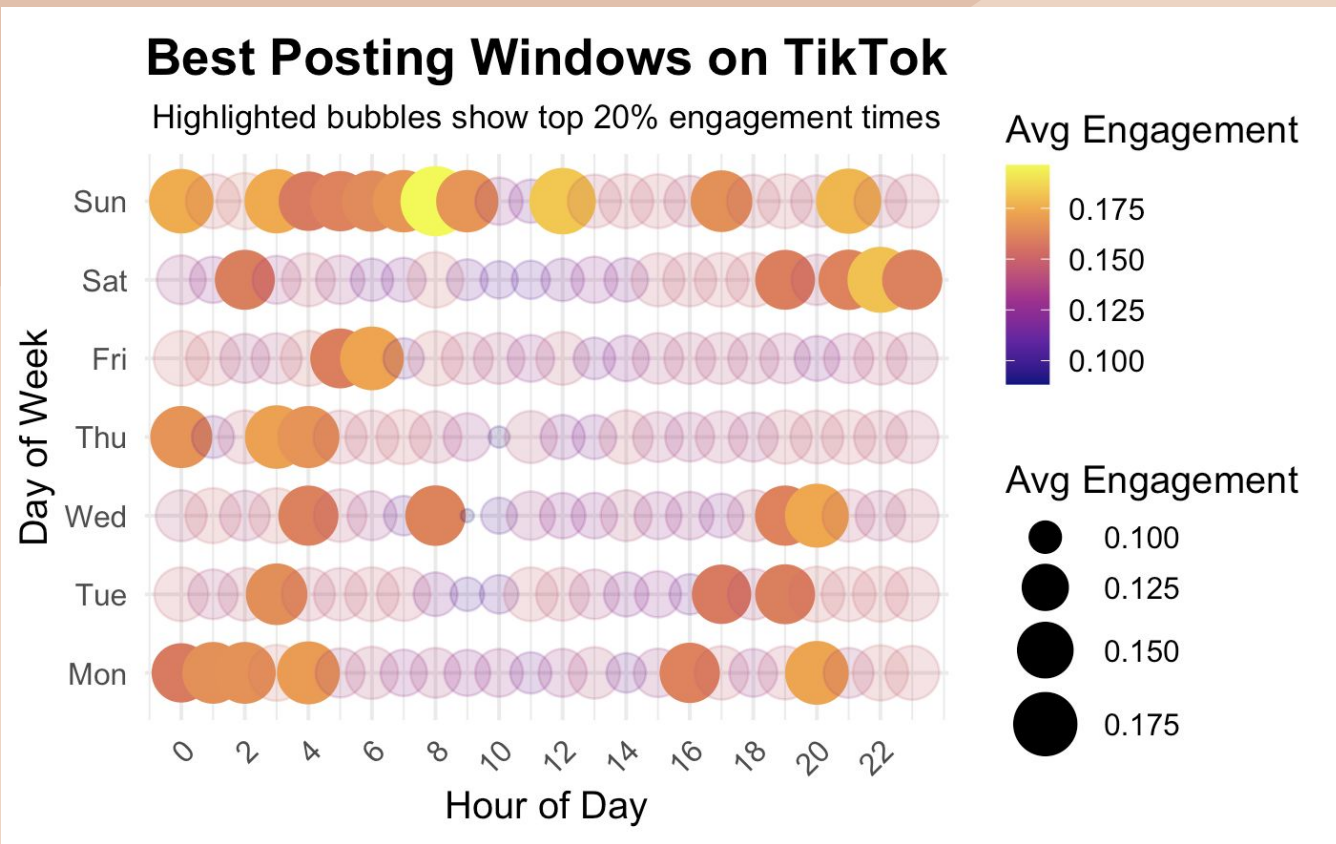
- All data are **publicly available** (no private information)
- Data were cleaned and standardized before analysis
- Engagement metrics are often skewed, so **log scales** are used in visualizations

Engagement Rate by Language

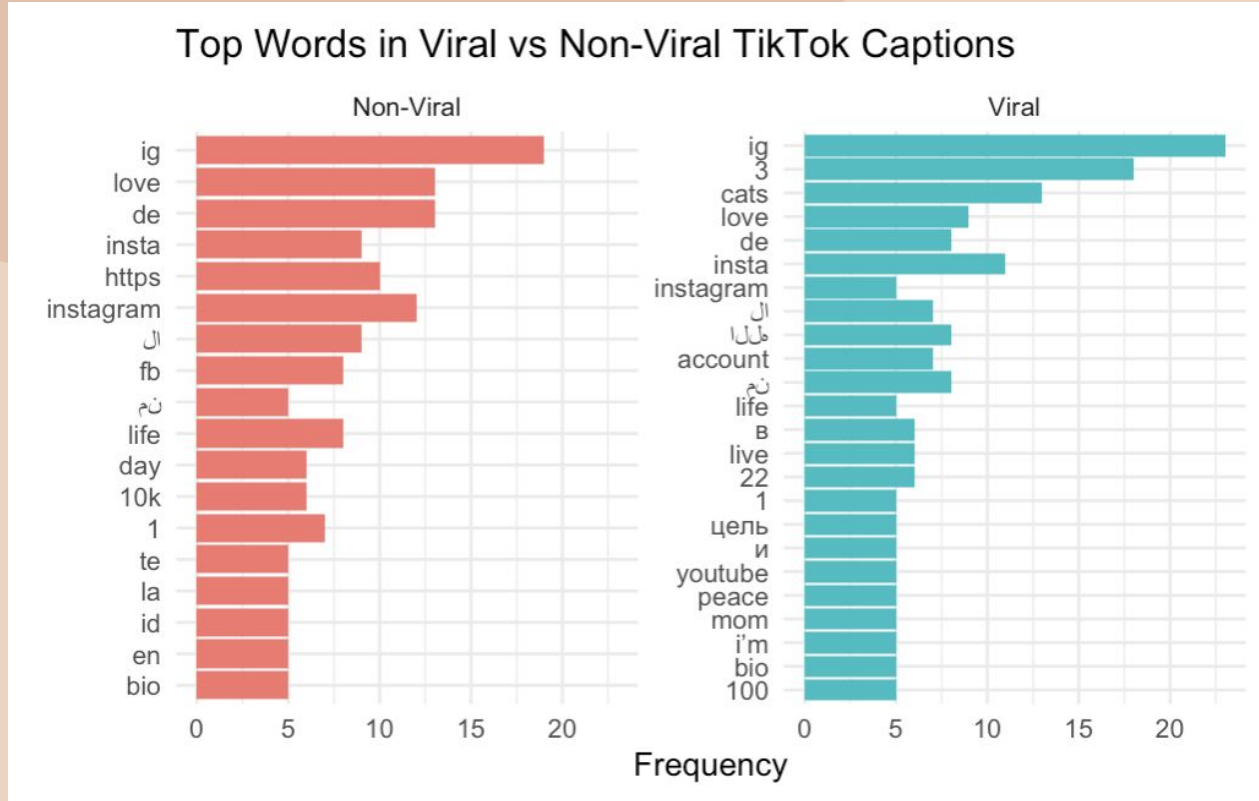
Engagement Rate by Detected Language (Top 10)



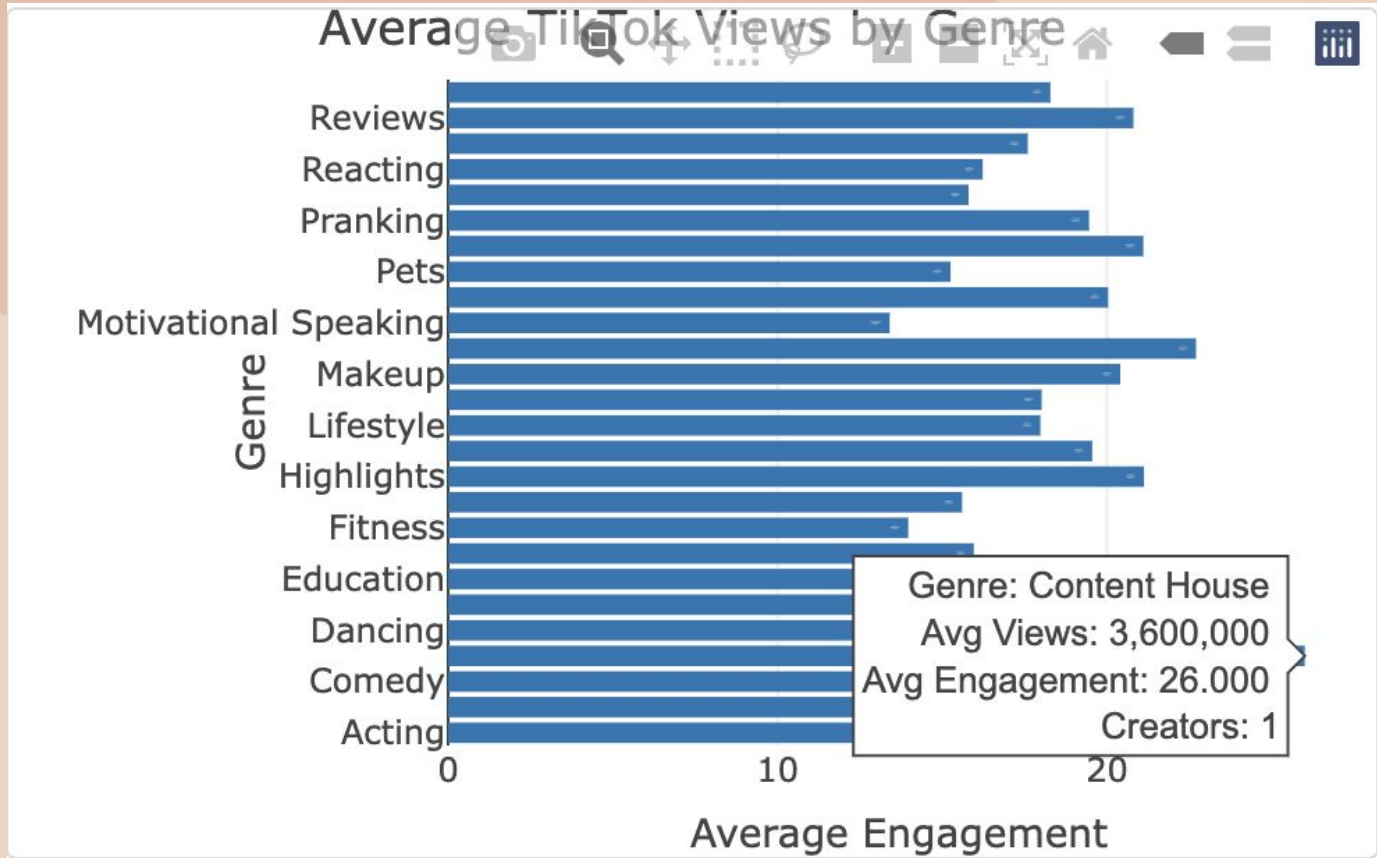
Best Posting Windows on TikTok



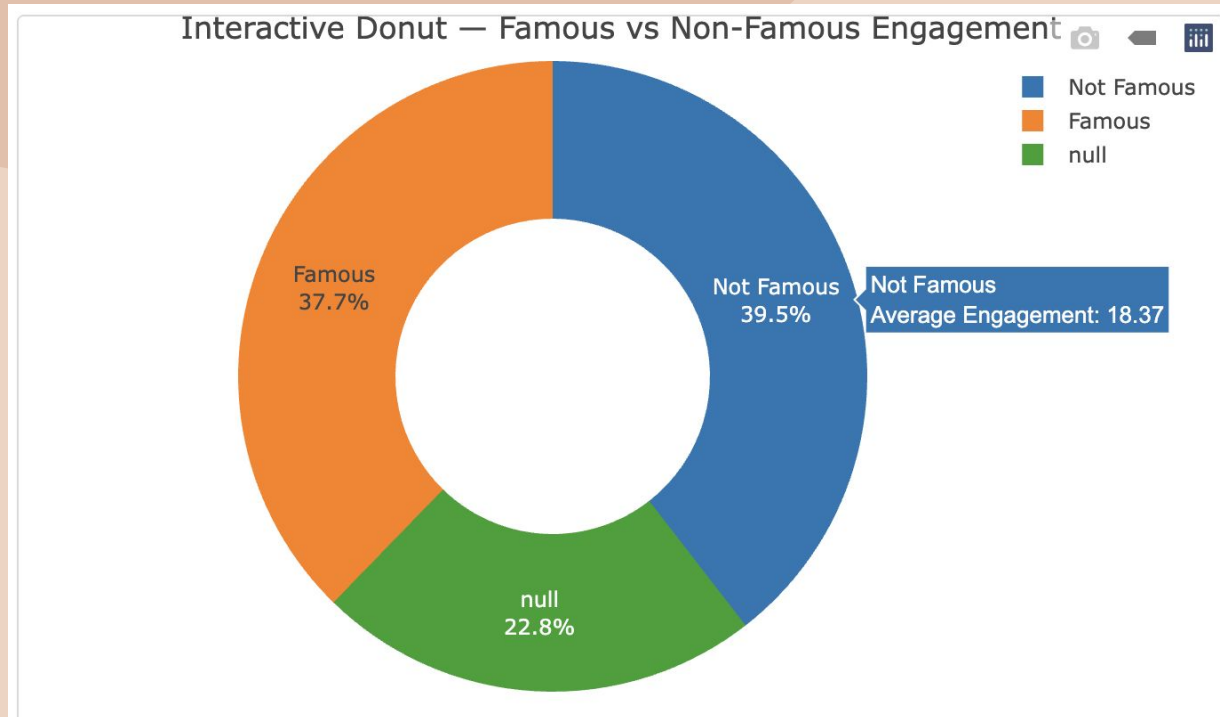
Hot Key Words in Viral TikTok Captions



Top Genres From Viral TikTokers Content

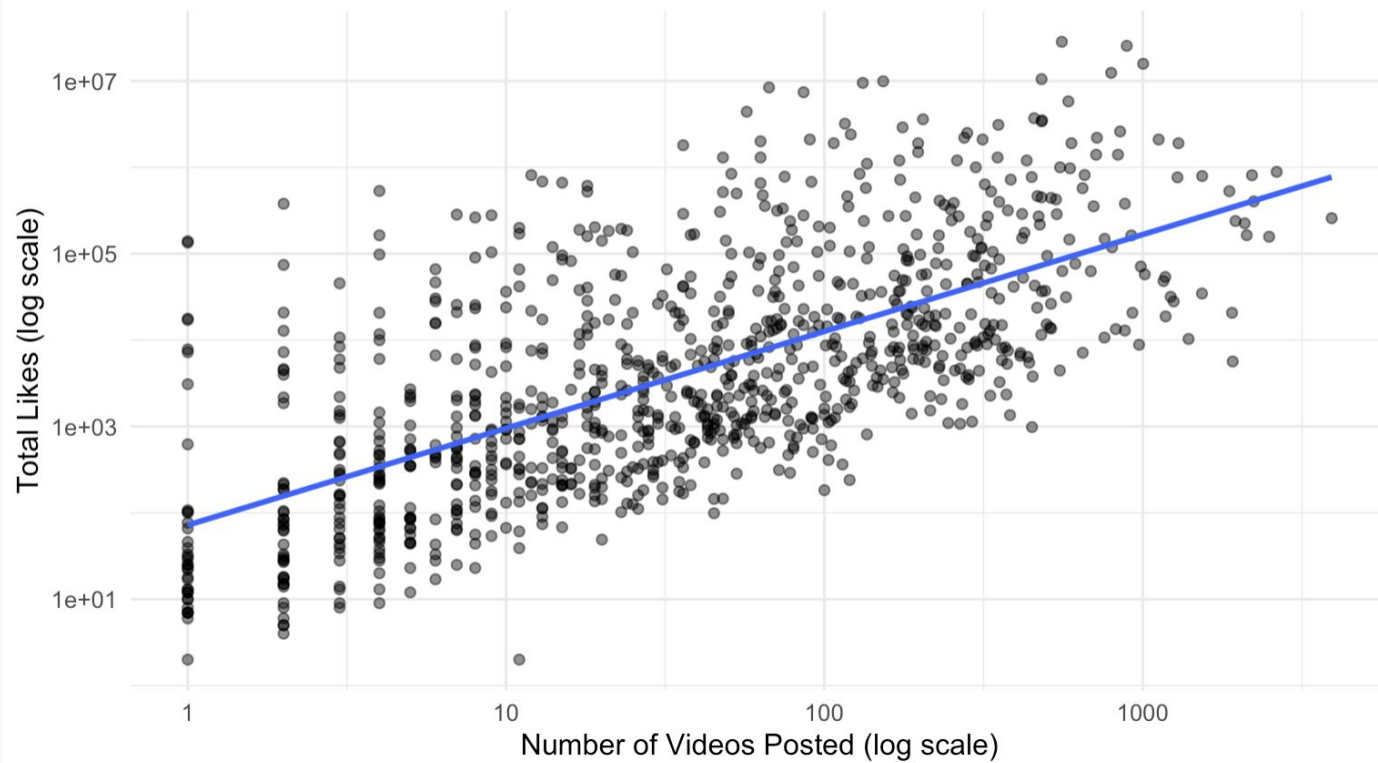


Does Famous before TikTok matter for becoming viral on TikTok?

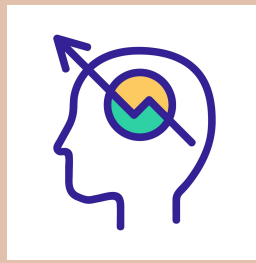


Posting Frequency and Total Likes

Log-log scale with linear trend

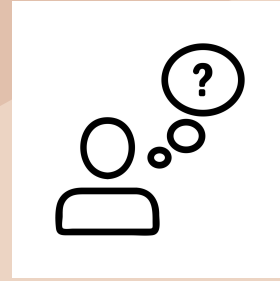


Conclusions



- Engagement rate is driven by strategy and platform dynamics
- Consistency, timing, content type and audience connection matters
- Entertainment Platform and Information Sharing Space

Limitations and Future Work



- Only public data, not comprehensive, may missing details
- Expand analysis
- Working on shaping public knowledge