

AMENDED Exhibit 503

PLAINTIFFS' OMNIBUS OPPOSITION TO DEFENDANTS' MOTIONS FOR SUMMARY JUDGMENT

Case No.: 4:22-md-03047-YGR

MDL No. 3047

In Re: Social Media Adolescent Addiction/Personal Injury Products Liability Litigation



Document Produced As Native

Nov 2019



Algo's Best Practices



Content

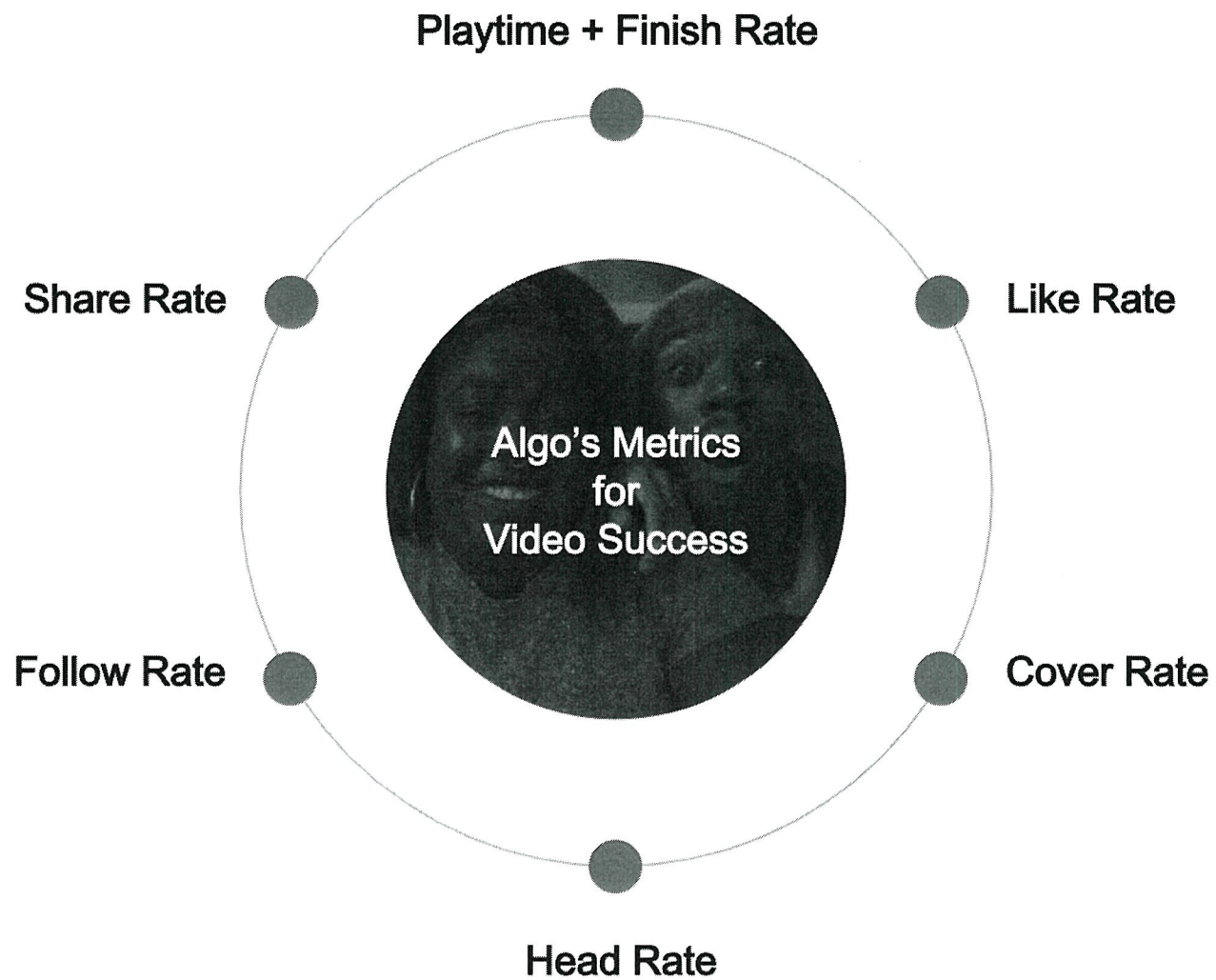


Creative



Ops

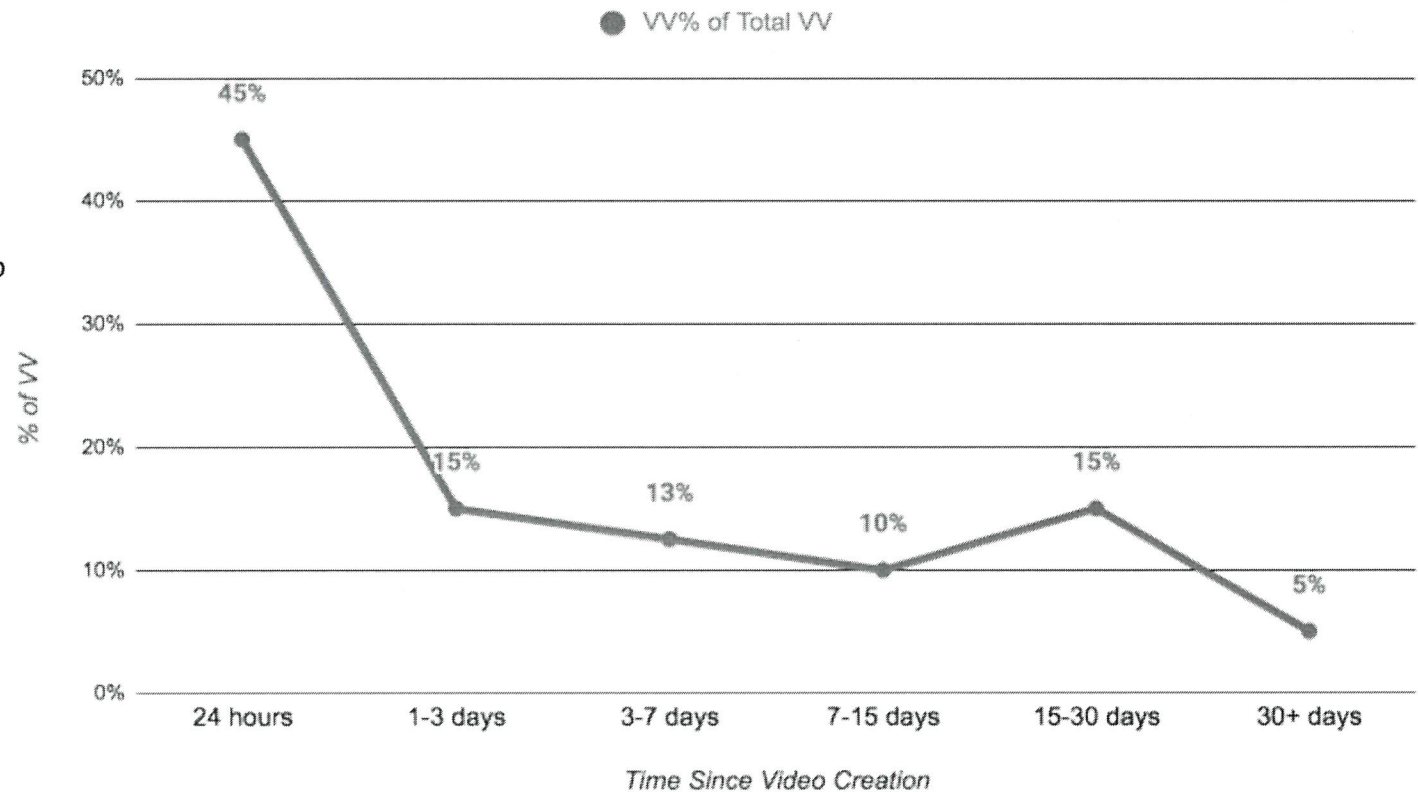
Safe	Follows Community Guidelines	Format	Avoids non-TikTok video ratios (square, horizontal, etc.) and Reacts	Account Label	Labeled as Whitelist+ or Creator
Age Level	L2345	Video Length	> 5 seconds	Localization	Set as country of target audience
Original	Not a duplicated content, including reposts	Strong Caption	Authentic captions. No spam or growth hacks.	Sound	Approved Track ID: 1) Licensed in the US 2) Artist is not on Blacklist



30-day VV Growth

The average vv distribution of a video over a 30-day period.

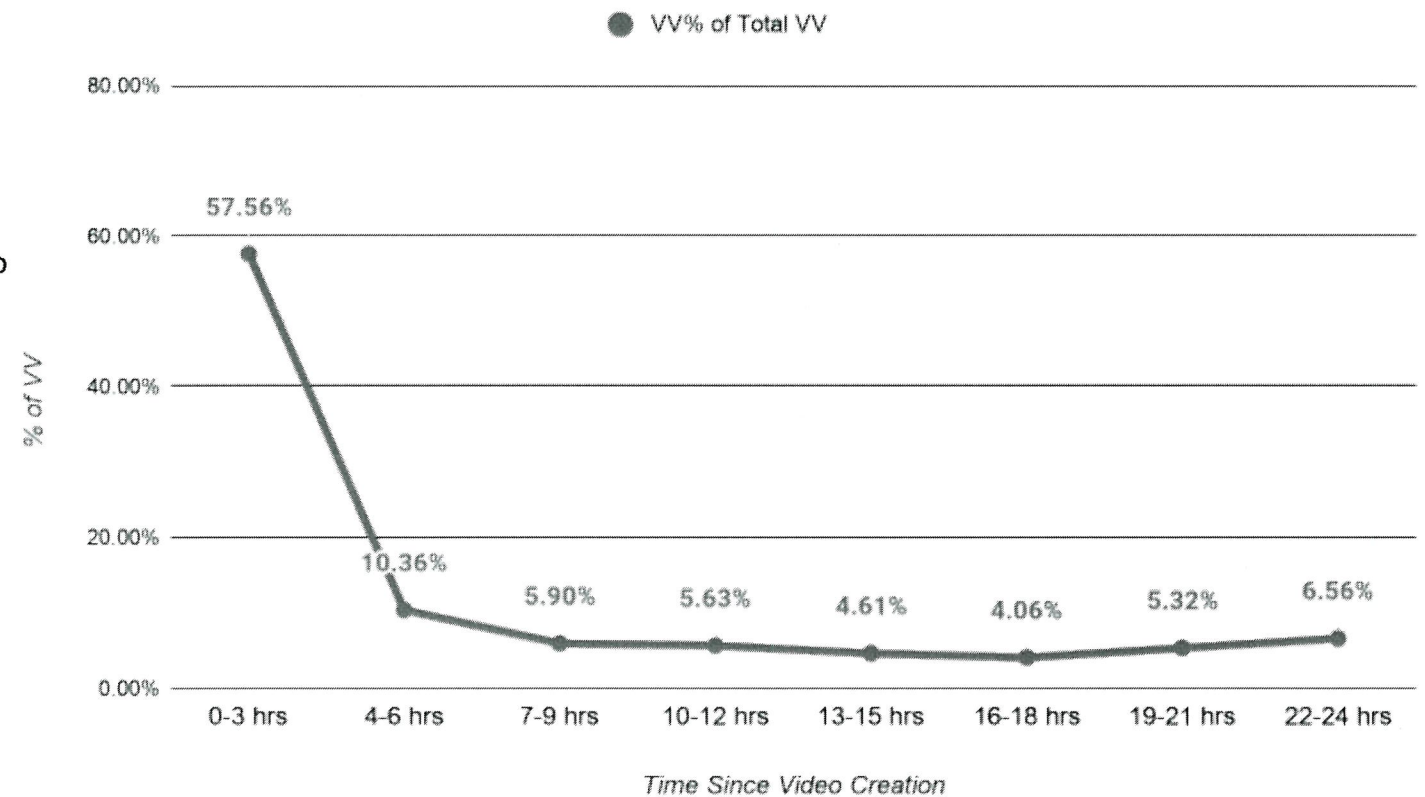
Average VV% in 30 Days



24-hr VV Growth

The average vv distribution of a video over a 24-hr period.

Average VV% in 24 Hours



Follow Feed

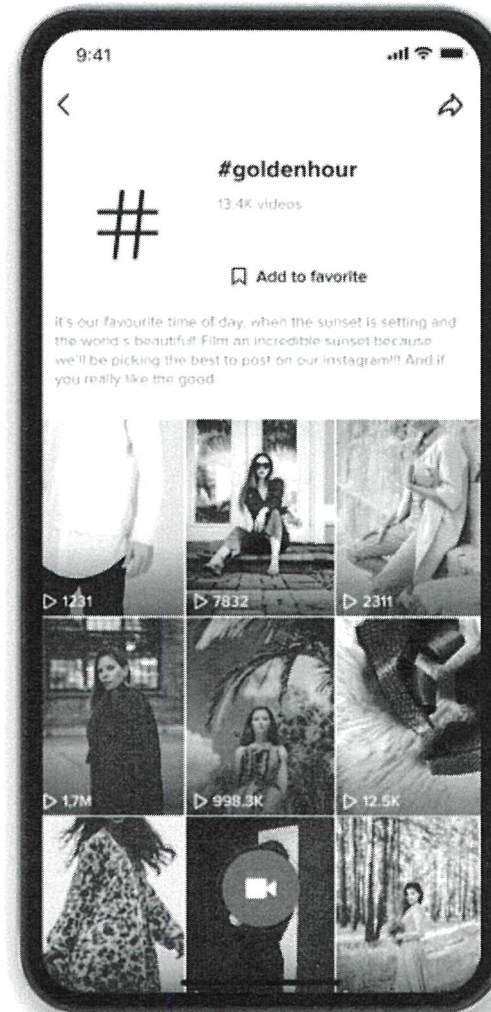
How do we select videos in the Follow Feed?



1. Sort user's followings by following time
2. Sort creators' videos in the last 30 days by create time
3. Filter videos by candidate rules
4. Rank the videos based on models

Hashtag Feed

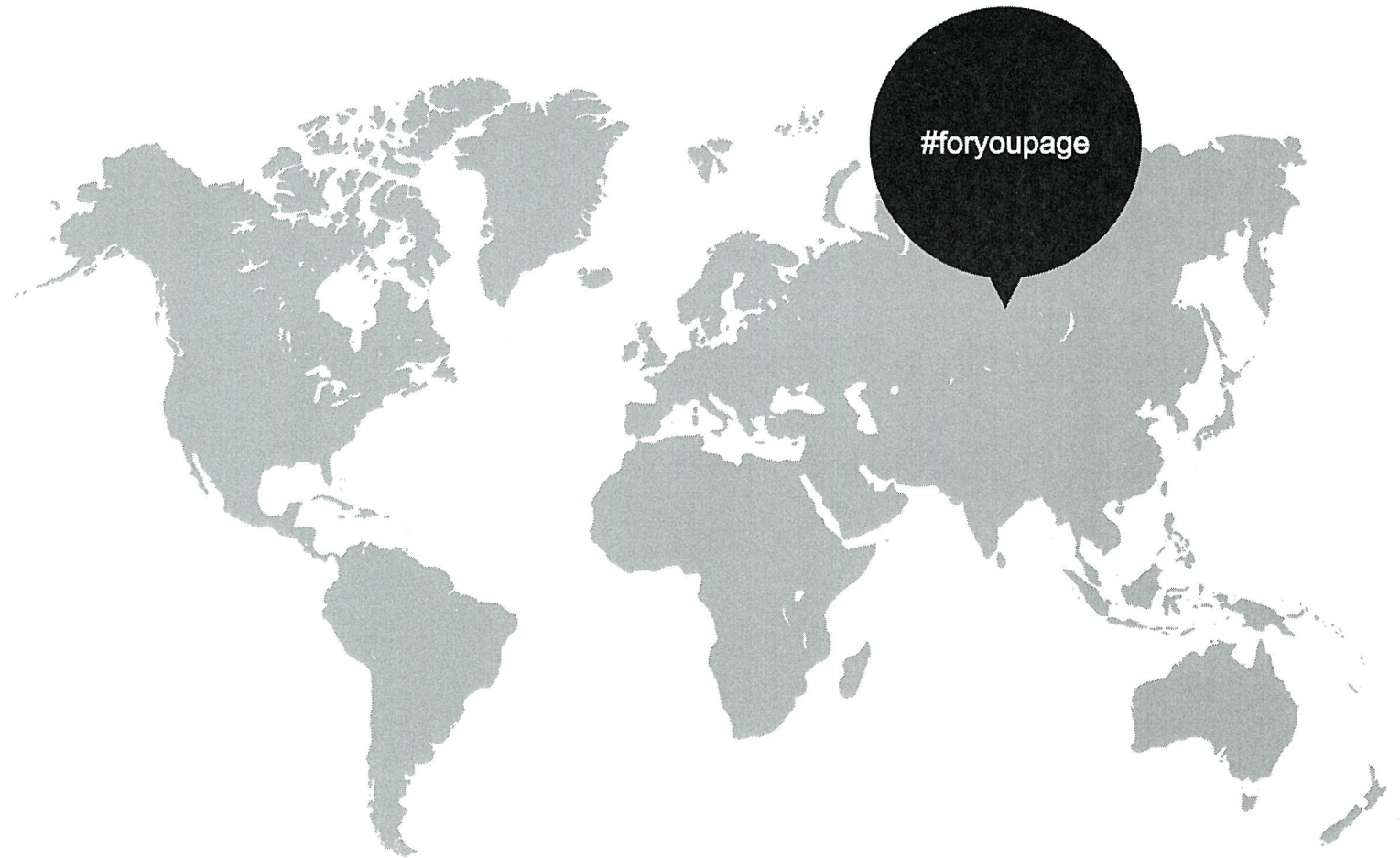
How do we select videos under a hashtag?



1. Filter all hashtag videos by candidate rules
2. Rank the videos by total likes
3. Boost videos from user's country
4. Demote videos by low level authors

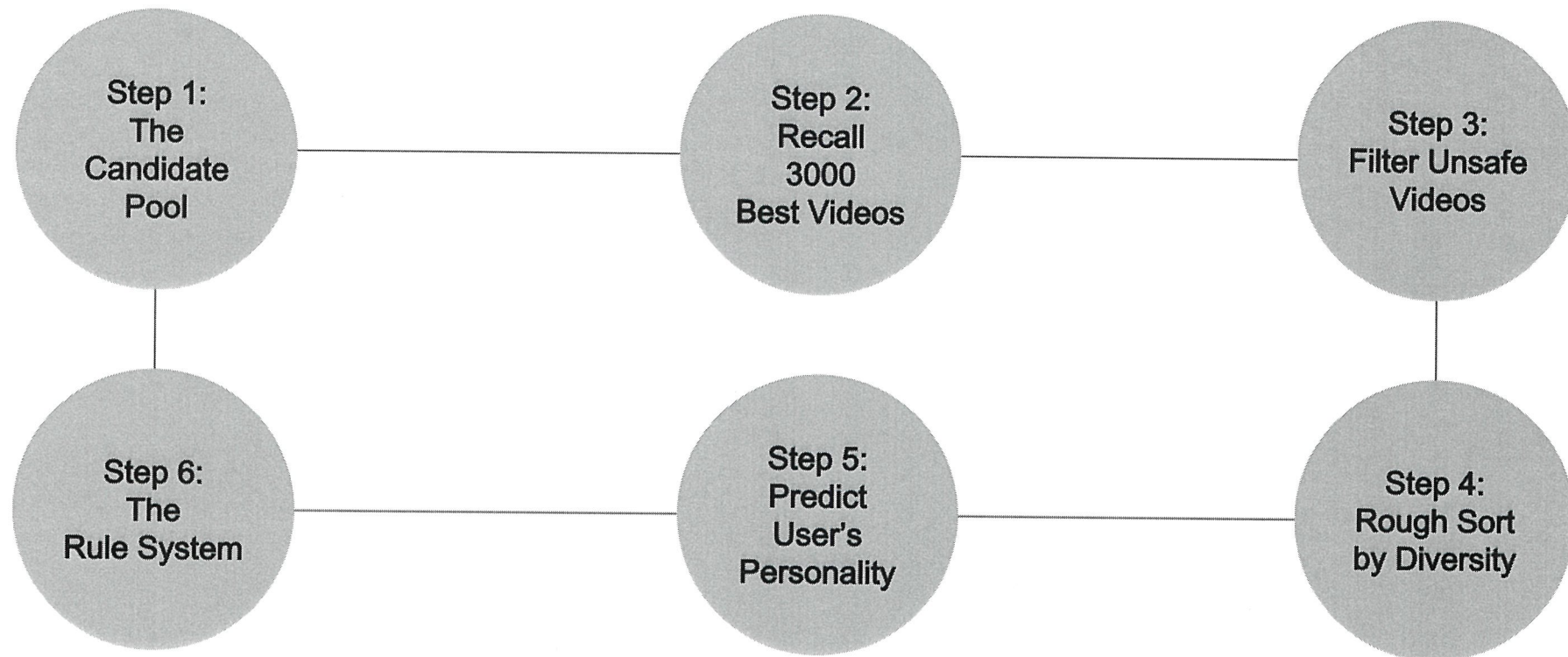
For You Feed

How do we choose the best videos from an *expanse* of DAU?



 TikTok

Recommendation Roadmap



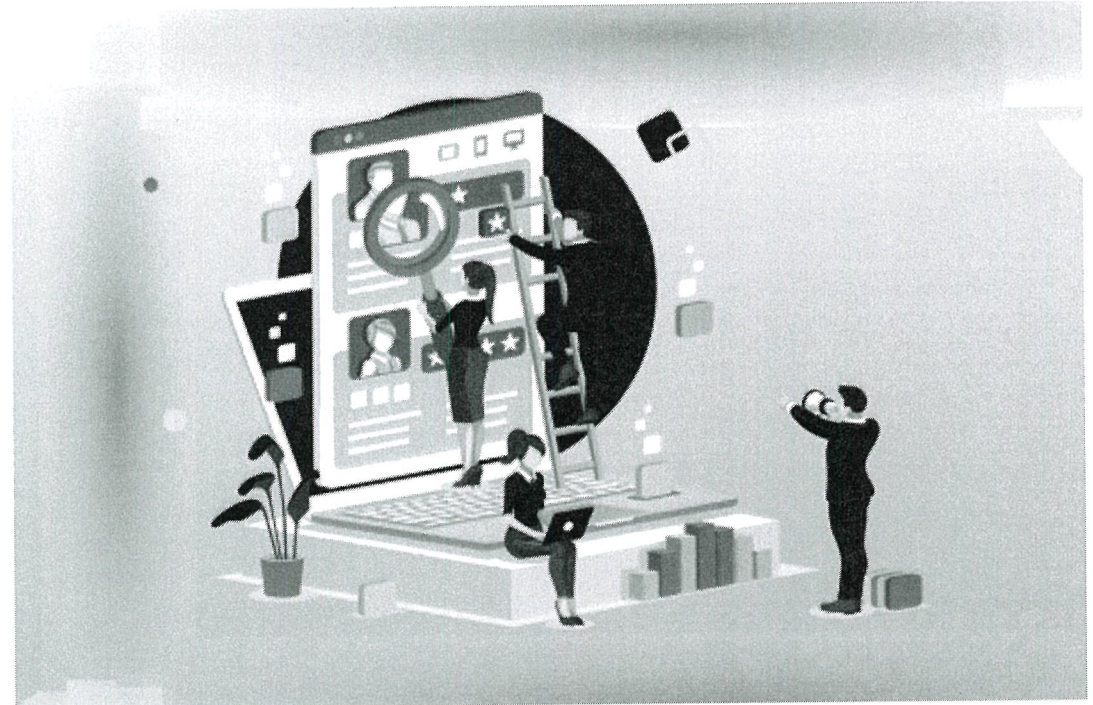
Qualify.



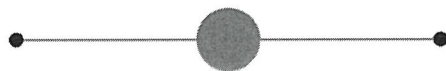
The Candidate Pool

To select the best videos from the historical video inventory, we condense our pool to the most recent, original, and TikTok-formatted videos created by 15+ users.

See the exact rules [here](#).

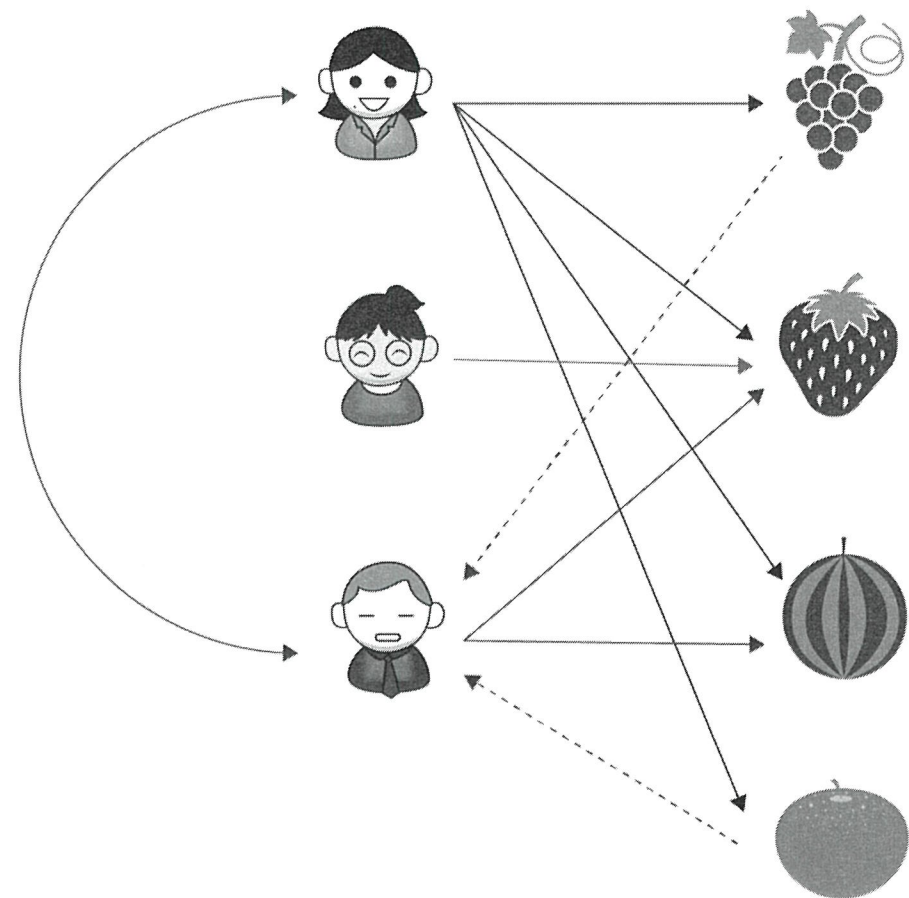


Predict.



How do we score a video?

Action rates play a key role throughout recommendation. All ***user actions***, like clicks and playtime, are inputs used to predict a user's personality and engagement on a given video.



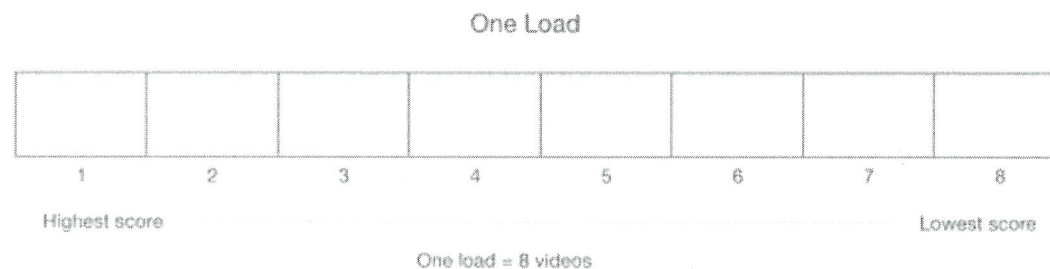
an example of collaborative filtering

Personalize.



Item Ranking

As we combine users' action rates (finish rate, like rate, follow rate, share rate, etc.) on each video, we rank videos by the **highest probabilities** of engagement by the user capped by frequency rules.



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