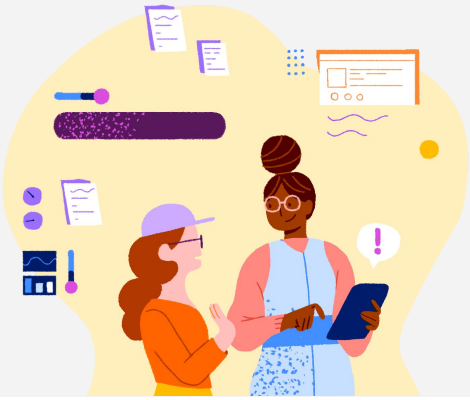
YouTube

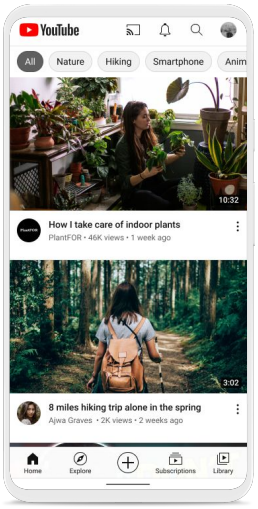
How YouTube recommends videos

Recommendations help viewers discover content that they love. We take many signals into account, including watch and search history, to recommend videos that are relevant to viewers. At the same time, we provide controls to help viewers manage the the recommendations that they see. We also have systems in place to reduce recommendations of harmful misinformation and borderline content.

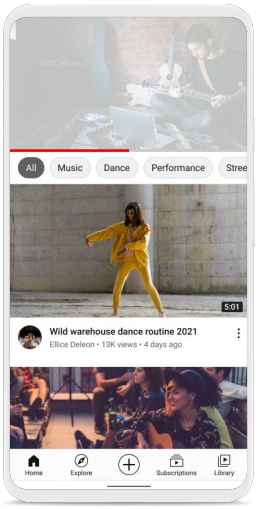


Where can video recommendations be found on YouTube?

Recommended videos and topics are found on the YouTube homepage and in the 'Up next' section, where users are given suggestions of what to watch next when watching a video.



Recommendations on the homepage



'Up next' recommendations on a watch page

How are videos recommended to viewers?

We take many signals into account to recommend videos that are relevant to each viewer.

Context signals

Location

Language

Time of day

Personal activity signals

Channel subscriptions

Search history
across YouTube and Google

Watch history
across YouTube and Google

Video performance signals

Appeal
Do viewers choose to watch a recommended video? (click-through rate, in-product user feedback)

Engagement
How long are viewers watching a recommended video for? (average view duration)

Satisfaction
Do viewers enjoy a specific video? (likes/dislikes, in-product user surveys)

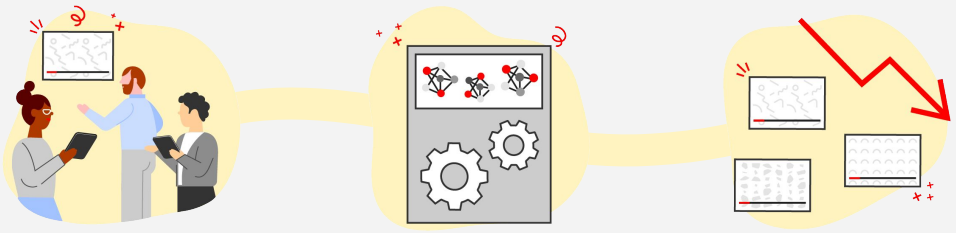
Responsibility signals

We reduce recommendations
of borderline content (content that comes close to – but doesn't quite cross the line of – violating our Community Guidelines) or videos that could misinform users in harmful ways

How does YouTube protect viewers from harmful recommendations?

In 2019, we announced changes to our recommendation systems to reduce the spread of borderline content, resulting in a 70% drop in watch time on non-subscribed, recommended content in the US that year. We saw a drop in watch time for borderline content coming from recommendations in other countries as well. As of March 2021, we have now rolled out changes to our recommendation system to reduce borderline content in every market where we operate.

How do you find and limit borderline content?



External evaluators make multiple assessments on the quality of a video

Machine learning systems build models based on consensus from evaluators

Systems review videos at scale to find and limit the spread of borderline content

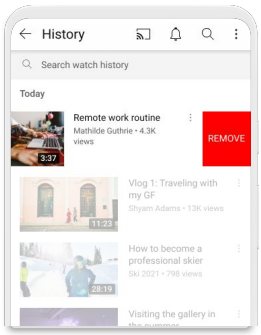
0.5%

While algorithmic changes take time to ramp up and you might see consumption of borderline content go up and down, our goal is to have views of non-subscribed, recommended borderline content below 0.5%.

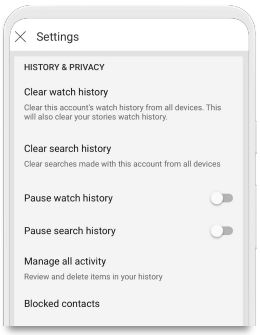
How can viewers control what is recommended to them?

YouTube offers viewers a range of tools that enable them to both fine-tune their experience on the platform and decide what personal information is used to influence recommendations.

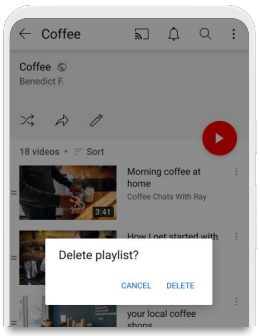
Manage personal activity signals



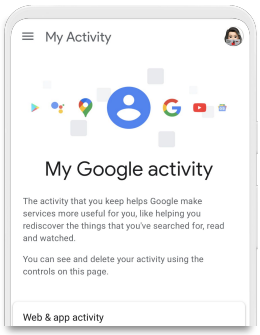
Remove specific videos from watch and search history



Clear or pause watch and search history

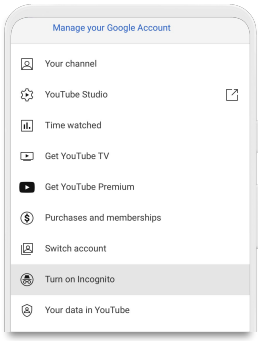


Remove liked videos, and edit or delete playlists



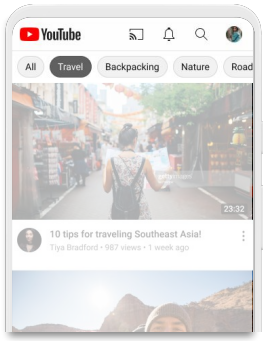
View and control browsing history across Google, at myactivity.google.com

Browse privately

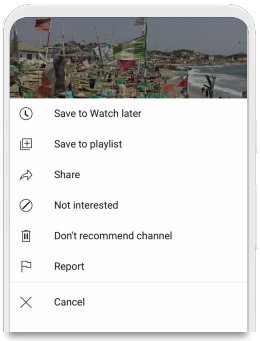


Browse in Incognito mode, so search and watch history don't have an impact on recommendations

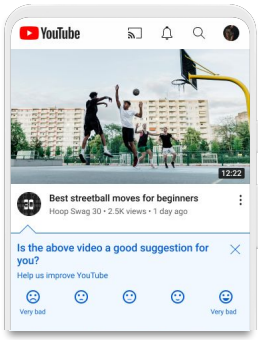
Fine-tune recommendations



Choose topics in Recommendations



Remove recommended content that isn't of interest



Give direct feedback via surveys

youtube.com/howyoutubeworks