

AMENDED Exhibit 229

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 Provided in Native Format



How Engagement Signals Often Fail to Identify Valuable Sensitive Content

 | FB App Integrity

October 2021

Ranking & Human Psychology

Too Brief, Simple Description of Ranking

- Feed (and comment threads) are ranked, generally, to show users what we think they will find most valuable
- Based on research, we try to predict what content users will find valuable
- Much of this is based on user engagement with content, where different types of engagement confer different amounts of value
- If content gets lots of engagement, our models generally assume that is because users like, want, and value it

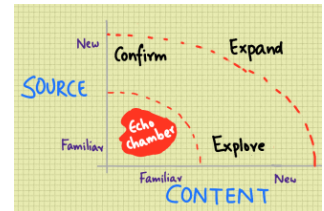
Component	Weight for 2020H1
Likes	1
Reaction	1.5
Reshares	1.5
RSVP maybe	4
Sticker Comment	12
Non-significant Comment / Message / Avatar Sticker	15
Significant Comment / Message	20
RSVP going	20



[1] "The algorithm" and how it works
[2] Table from Lada, Mocanu, & Bower, 2020

Generally, engagement signals value, but on sensitive topics it may mislead

- In some domains, like civic, politics, and even in some health domains (e.g., vaccines, COVID-19) people tend to form social networks comprised of people who disproportionately share their beliefs and do not fact-check their personal beliefs
- In these echo chambers, people polarize, and are more likely to embrace conspiracy theories, hate speech, and false news (DeVicario et al., 2016; Ramchandani et al., 2020)
 - This stems, in part, because highly similar people love and support ideas that they believe, which may be hateful of a minority group or political party, or may be skeptical of vaccine science
- Consistent with this, we see that [user agreement with the beliefs stated in comments predicts their perception of that comment being “high quality”](#)



<https://arxiv.org/abs/2007.08078>

<http://www.cs.toronto.edu/~ashton/pubs/alg-effects-spotify-www2020.pdf>

