FACEBOOK ALGORITHM

HOW FACEBOOK WORKS

- In 2004, Mark Zuckerberg, Dustin Moskovitz and Chris Hughes, three Harvard University students, launched a Web site designed to put students in touch with one another, share their photos and meet new people.
- They called it **thefacebook.com**, and before long the site became extremely popular on the Harvard campus.
- A month after the site launched, the creators expanded it to include students from Stanford, Columbia and Yale.
- By 2005, students in 800 college networks across the United States could join the network, and its membership grew to more than 5 million active users.
- In August of that year, the site's name changed to **Facebook**.
- Facebook was **originally intended for college students, but today anyone can join the network**.
- Although the site's scope has expanded to include more than just students, its purpose remains the same -- giving people a way to share information in an easy and entertaining way **to share information in an easy and entertaining way**.

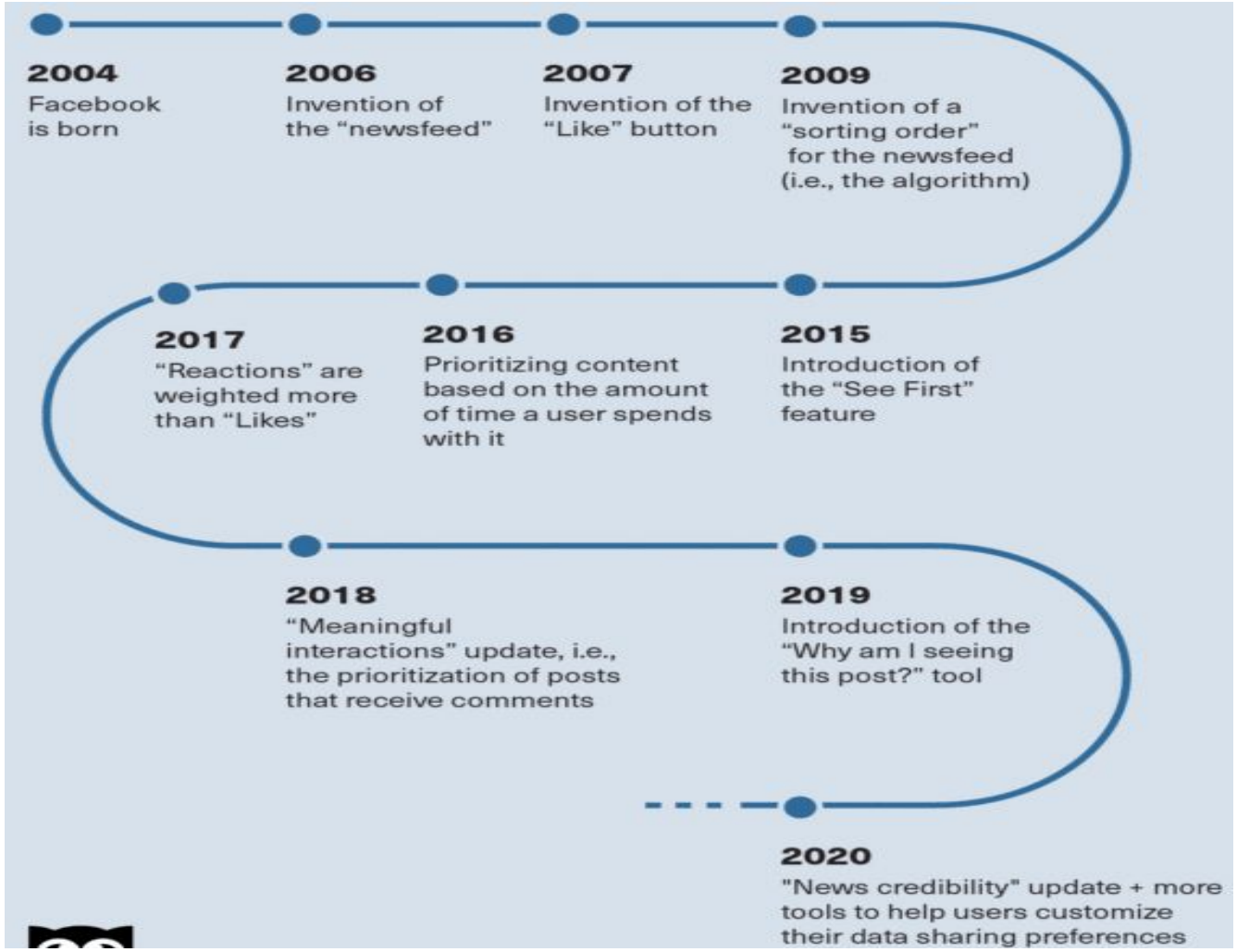
WHAT IS THE FACEBOOK ALGORITHM?

- The Facebook algorithm decides which posts people see every time they check their Facebook feed, and in what order those posts show up.
- For its part, Facebook would like to remind us that there is **no single algorithm, but rather "multiple layers of machine learning models and rankings**," built to **predict which posts will be "most valuable and meaningful to an individual** over the long term."
- In other words, instead of presenting every available Facebook post in chronological order, the Facebook algorithm evaluates every post, scores it, and then arranges it in descending order of interest for each individual user.
- This process happens every time a user - and there are 2.7 billion of them—refreshes their newsfeed.
- All social media recommendation algorithms - one of the goals is to keep people scrolling, so that they see more ads.
- What does this mean for brands? **When it comes to earning more organic reach, the Facebook algorithm will reward you for posting content that people engage with**.

BRIEF HISTORY OF THE FACEBOOK ALGORITHM

- The **Facebook algorithm isn't static**; engineers are constantly tinkering with it.
- To make its predictions, the algorithm uses thousands of data points, a.k.a. **ranking signals**.
- Over the years, ranking signals have been added, removed, and had their importance adjusted, depending on what Facebook thinks users want to see.

Notable changes in Facebook Algorithm



Source: https://blog.hootsuite.com/facebook-algorithm/

ALGORITM: TIMELINES

2003-2009

✔ Facebook was born in 2004.
- The Facebook **newsfeed debuted in 2006**.
- The **Like button showed up in 2007**.
- In **2009, Facebook premiered a sorting order** where the posts with the most likes appeared at the top of the feed.

2015

✔ Started **down ranking Pages that posted a high volume of overly promotional content**. (i.e., organic posts with content identical to ads.)

✔ "**See First" feature** allowed users indicate that their liked a posts to be prioritized in their feed.

2016

✔ Facebook added a "**time spent**" ranking signal.

✔ In other words, it started measuring a **post's value based on the amount of time users spent with it**, even if they didn't like or share it.

✔ **Live video was also prioritized**, as it was earning 3x more watch time than regular video.

2017

✔ This was the year that Facebook **started prioritizing emotional reactions**, by weighing reactions (i.e., hearts or the angry face) more than classic Likes.

✔ Another **ranking signal was also added for video: completion rate**. In other words, videos that keep people watching to the end are shown to more people.

ALGORITM: TIMELINES

2018

- ✔ In January 2018, Facebook announced that the Facebook algorithm would prioritize **"posts that spark conversations and meaningful interactions."** . The changes were meant to increase the quality of the time people spend on Facebook, and take responsibility for how the **platform affects its users' mental health and overall well-being**.
- ✔ Brands had valid concerns about this shift. **Posts from friends, family and Facebook groups were given new weight**, **over and above organic content from organizations and businesses**.
- ✔ To get traction, brands would now need to earn a lot more high-value engagement (eg., comments, reactions, comment replies—and if a post was shared over Messenger to a friend, that counted too).

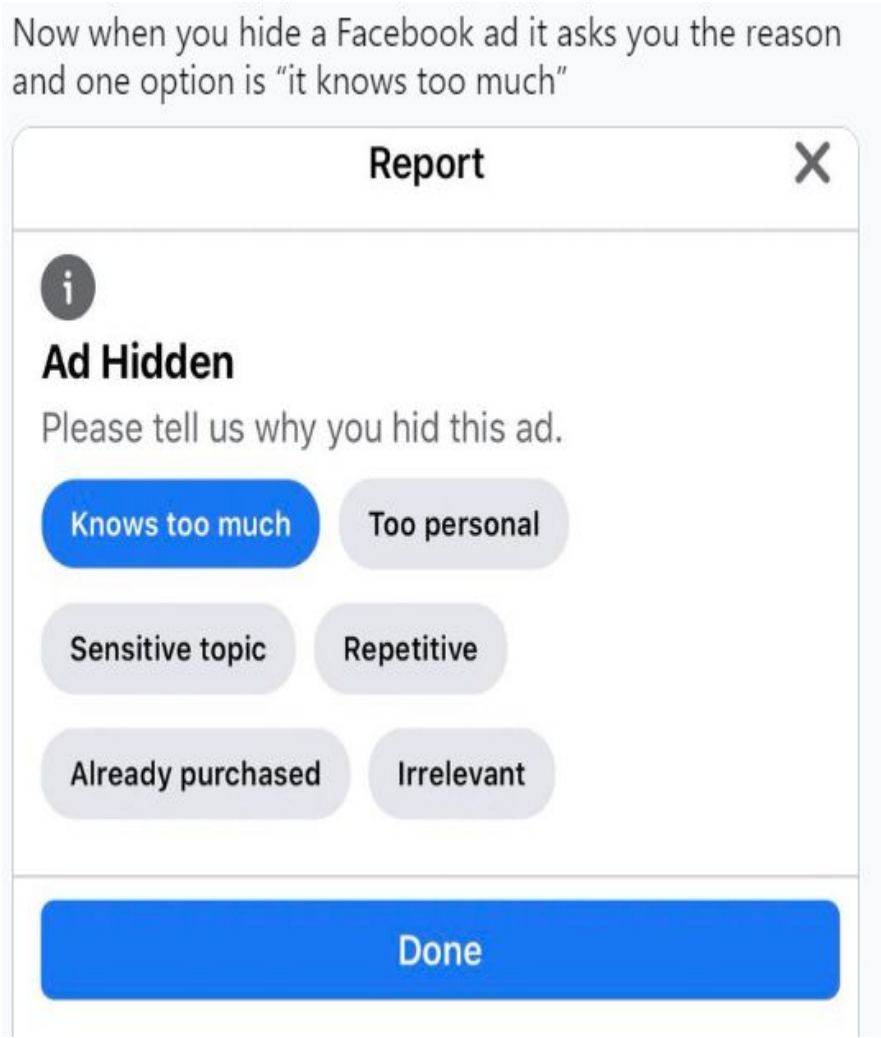
2019

- ✔ Updates in 2019 included **prioritizing "high-quality, original video**" that keeps viewers watching longer than 1 minute, and especially video that holds attention longer than 3 minutes.
- ✔ Facebook also started bumping up posts and content from "close friends": i.e., **those that people engage with the most**, whether that's by tagging each other in photos or DMing in Messenger.
- ✔ Meanwhile, Facebook was receiving a lot of criticism on two fronts.
  - ✔ Firstly, **increased outrage and divisiveness, political polarization, and promoted misinformation and borderline content**.
  - ✔ And secondly, critics did not like the techniques or **quantity of personal data that Facebook was collecting in order to feed the algorithm**.

ALGORITM: TIMELINES

2020

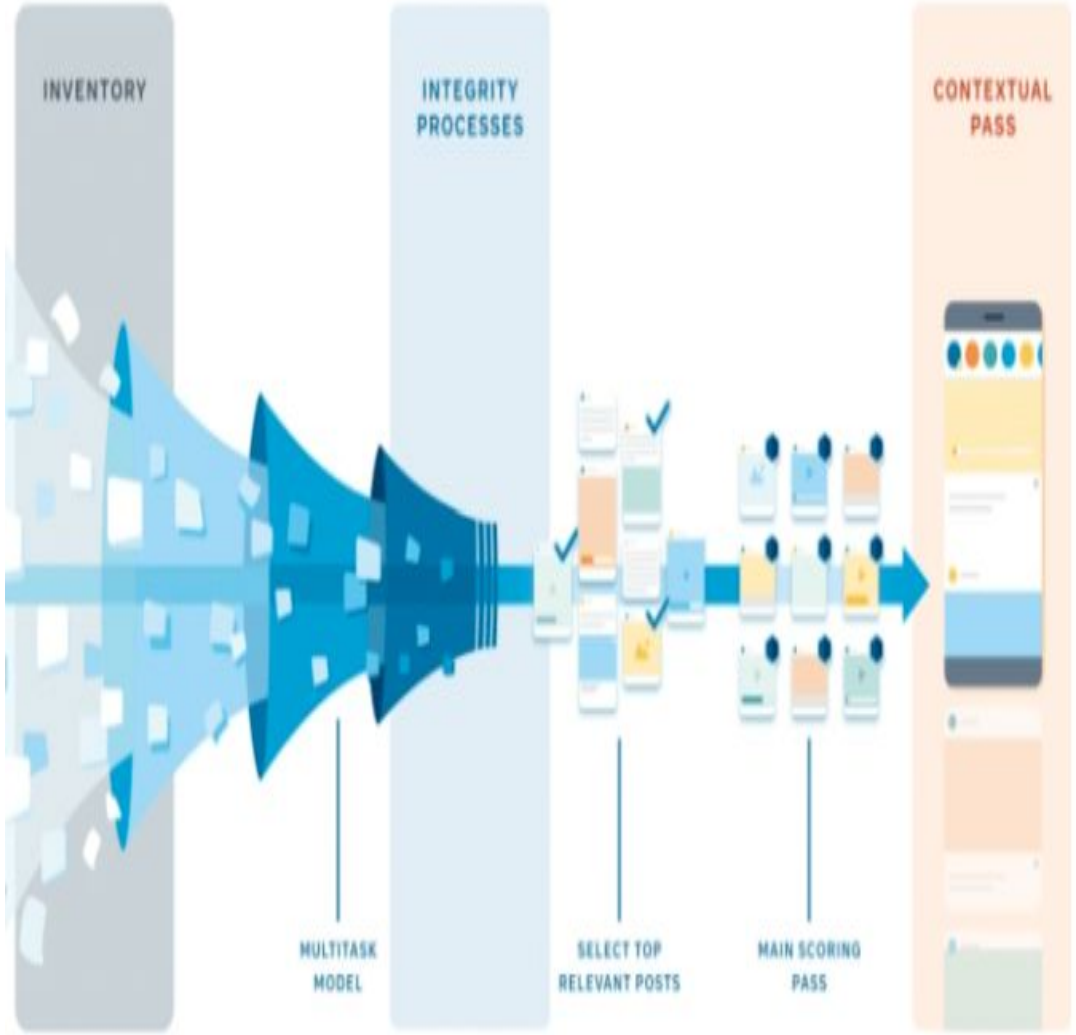
- ✔ Facebook announced that it was helping users understand the algorithm, and take control of their own data to give the algorithm better feedback.
- ✔ However, people have been increasingly concerned about their privacy, and for many, "more relevant ads" does not seem like a worthwhile trade-off.
- ✔ Meanwhile, on the fake news front, in 2020 Facebook announced that its algorithm will now evaluate the credibility and quality of news articles in order to promote substantiated news rather than misinformation.



Source: https://blog.hootsuite.com/facebook-algorithm/

How does the Facebook algorithm work IN 2021

- ✔ First, Facebook takes every post available in a user's network (a.k.a. the "inventory"), and it scores those posts according to predetermined ranking signals, like type of post, recency, etc.
- ✔ Next, it discards posts that a user is unlikely to engage with, based on that user's past behaviour. It also demotes content that users don't want to see (i.e., clickbait, misinformation, or content that they've indicated they don't like).
- ✔ Then, it runs a "more powerful neural network" over the remaining posts to score them in a personalized way. (For example: Mona is 20% likely to watch tutorial videos from her chess Group, but 95% likely to post a heart reaction to a photo of her sister's new puppy) and ranks them in order of value.
- ✔ And finally, it arranges a nice cross-section of media types and sources so that a user has an interesting variety of posts to scroll through.

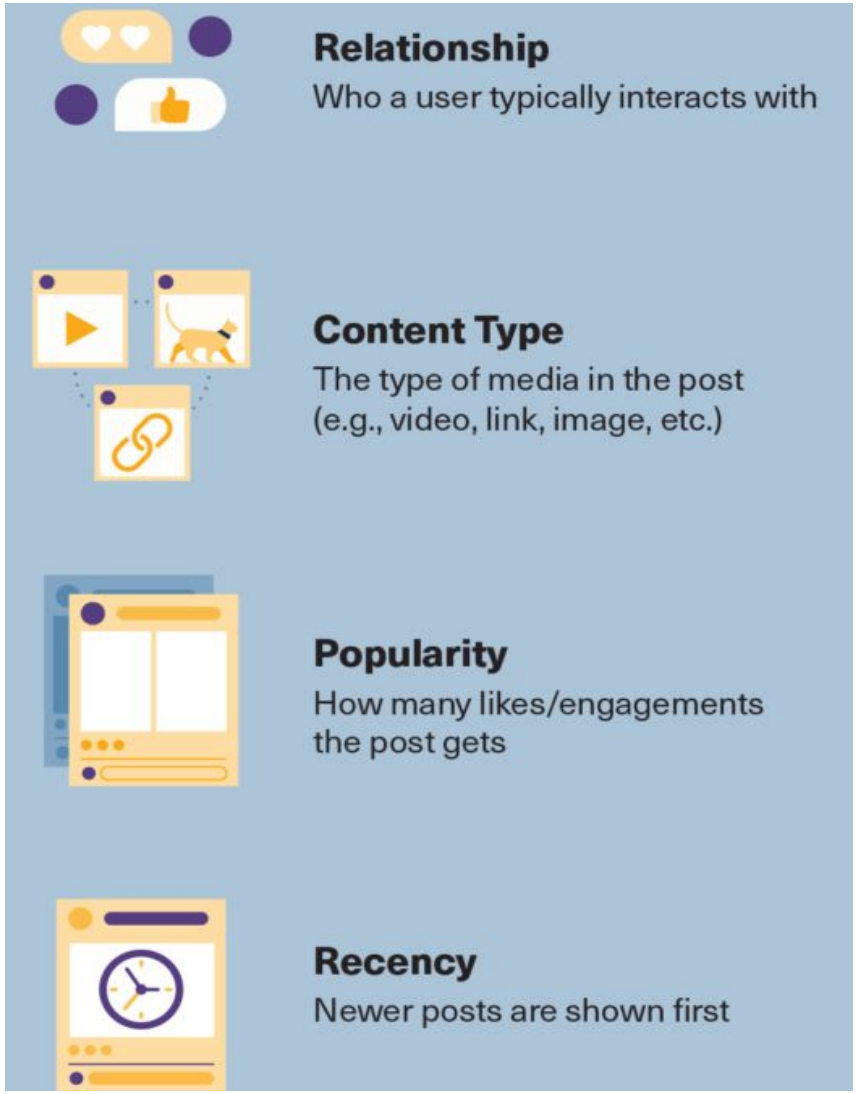


Source: Facebook

FOUR FACEBOOK ALGORITHM RANKING SIGNALS TO CONSIDER

- **Relationship:** Is the post from a person, business, news source or public figure that the user often engages with? (i.e., messages, tags, engages with, follows, etc.)
- **Content type:** What type of media is in the post, and which type of media does the user interact with most? (i.e., video, photo, link, etc.)
- **Popularity:** How are people who have already seen the post reacting to it? (Especially your friends). Are they sharing it, commenting on it, ignoring it, smashing that angry face?
- **Recency:** How new is the post? Newer posts are placed higher.

Most of these signals require that Facebook track its users' behaviour. Which is where the privacy vs. personalization debate comes up.



Source: https://blog.hootsuite.com/facebook-algorithm/

REFERNCES

1. Paige Cooper, How the Facebook Algorithm Works in 2021 and How to Make it Work for You, February 10, 202 available at https://blog.hootsuite.com/facebook-algorithm/.
2. https://computer.howstuffworks.com/internet/social-networking/networks/facebook.htm