

TECHNOLOGY

Instagram May Change Your Feed, Personalizing It With an Algorithm

By **MIKE ISAAC** MARCH 15, 2016

For years, we have been trained to view web postings from our friends in a certain order. Refresh the top of your various “feeds” — the running column of content on some versions of Facebook, Twitter and Instagram — and you will see the latest news at the top. The further back you scroll, the older the material gets.

As our online networks of friends have grown larger and the social media companies have matured, the feeds have evolved. Facebook changed its news feed in 2009 by switching to an algorithm largely based on the popularity of posts, among other signals. Last month, Twitter introduced older, popular tweets to the top of users’ feeds, out of order, if the user had been away from the service for a time.

On Tuesday, Instagram joined that club. The photo-sharing service plans to begin testing an algorithm-based personalized feed for users, similar to one already used by its parent company, Facebook. That means it would shift away from the strictly reverse chronological order that the service has used since it began in 2010. Instead, Instagram will place the photos and videos it thinks you will most want to see from the people you follow toward the top of your feed, regardless of the time those posts were originally shared.

That could mean that if your best friend posted a photo of her new Bernese mountain dog’s puppies five hours ago while you were on a flight without Internet connectivity, Instagram might place that image at the top of your feed the next time you open the app. Based on your history of interaction with that friend, Instagram knows you probably would not want to miss that picture.

The move is partly a function of Instagram’s popularity. The service is home to more than 400 million regular visitors, and Facebook hosts 1.59 billion monthly users. Companies have had to find better ways to deal with the sheer amount of content flowing through the networks on a minute-by-minute basis.

“On average, people miss about 70 percent of the posts in their Instagram feed,” Kevin Systrom, co-founder and chief executive of Instagram, said in an interview. “What this is about is making sure that the 30 percent you see is the best 30 percent possible.”

More broadly, the change reflects the adjustments that occur time and again on the consumer Internet. In the early days of the web, users largely congregated around portals like AOL and Yahoo, before Google gained ground, beckoning people to type in queries to find exactly what they were seeking. Then, social networking ushered in the era of the feed: a simple, linear way to gather and display the content contributed by your friends and family worldwide.

At the time, it was a revolutionary idea. “Feeds are a powerful way for users to navigate the web and get to the information they need,” Fred Wilson, a venture capitalist and early investor in Twitter, wrote in a personal blog post in 2008. “My kids are growing up with the news feed as their start page. Not Yahoo’s portal approach and not Google’s search box approach.”

While feed-based networks have grown dominant over the last decade, they must be reinvented to keep audiences coming back and staying longer. That is especially true as older networks face newer competitors like Snapchat — which is almost entirely focused on the camera as the user interface — or text messaging apps like WeChat in China.

“These companies want to always, always give you the next best thing to look at,” said Brian Blau, a vice president at Gartner, an industry research firm. “If an algorithm can give you much more engaging content more frequently, you’ll stick around longer.”

Yet changing Instagram’s feed will most likely be tricky and may arouse the ire of fans, who are accustomed to the way their photos and messages are ordered. Many web companies have faced complaints when they altered the way their feeds were presented.

When Facebook moved away from a reverse chronological feed in October 2009, for instance, users revolted almost instantaneously. Facebook-hosted groups like “Change Facebook back to normal!!” sprang up and quickly attracted hundreds of thousands of followers. Twitter, too, faced intense criticism last month when it said it was experimenting with moving away from its reverse chronological feed.

Vickie Mulkerin, a 49-year-old Instagram user and resident of Madison, Wis., who has been on the service for the last three years, says she loves using Instagram to look at photos of animals and, more recently after trying a new recipe, at other users’ photos of loaves of freshly baked bread. She said she appreciated the immediacy of the Instagram feed.

“I like how I can open the app and see what my stepsister Ashley is doing today with my niece and nephew, right in that very moment,” she said. “I want to judge what’s important, not have some algorithm tell me what it thinks is important.”

Instagram said that the change would not be quick or jarring, and that it would start the shift in a series of small tests with a single-digit percentage of user groups before deciding whether to introduce the changes broadly.

Instagram plans to rely on its machine-learning technology and a mix of signals to determine the order of photos and videos in users’ feeds, including the likelihood a person will be interested in the content, the timeliness of the posts and the relationship between the two users. As they are now, posts will be clearly stamped with the date they occurred.

Mike Krieger, Instagram’s co-founder and chief technology officer, said the changes to the feed may be less disruptive than those of other networks, considering Instagram is centered almost entirely on photos, not words.

“Look at my feed now. I follow accounts from all over the world,” Mr. Krieger said, noting that 75 percent of Instagram’s audience is outside the United States, and many of the users he follows post content he would otherwise miss while he’s sleeping. “It doesn’t really matter to me what time it is.”

The shift will not affect Instagram’s advertising products, which already use and rely on similar targeting principles to serve ads to users. If the changes go well, they could serve to bolster Instagram’s business. The more time people spend using Instagram, the more often the company is able to serve people ads.

The idea to adjust how photos and videos are presented in Instagram feeds has been discussed at the service’s Menlo Park, Calif., offices for months. Mr. Systrom said he often found himself waking up in the morning and scrolling back through his feed to see all of the posts he missed while he was asleep, but guessed that he probably missed a great deal of the “best” material from the 613 people he follows.

Mr. Systrom said he was also mindful of how people might react to the change.

“If it’s one thing we do really well as a company, it’s that we take big change slowly and deliberately and bring the community along with us,” he said. “It’s not like people will wake up tomorrow and have a different Instagram.”

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