

ONE HUNDRED FIFTEENTH CONGRESS
Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
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MEMORANDUM

November 27, 2017

To: Subcommittees on Digital Commerce and Consumer Protection and Communications and Technology Democratic Members and Staff

Fr: Committee on Energy and Commerce Democratic Staff

Re: Hearing on “Algorithms: How Companies’ Decisions About Data and Content Impact Consumers”

On **Wednesday, November 29, 2017, at 10:00 a.m. in room 2123 of the Rayburn House Office Building**, the Subcommittees on Digital Commerce and Consumer Protection and Communications and Technology will hold a joint hearing titled “Algorithms: How Companies’ Decisions About Data and Content Impact Consumers.”

I. BACKGROUND

The internet has become the major source of news, information, and advertising for Americans. At the same time, the number of websites consumers turn to for this information has consolidated to a handful of popular platforms.¹ The practices of these few platforms play a key role in determining what content the majority of people see online.² The order in which content

¹ *Referral Traffic - Google or Facebook?*, Statista (May 24, 2017) (www.statista.com/chart/9555/referral-traffic---google-or-facebook/); *In the Americas, Netflix + Google + Facebook = The Internet?*, Sandvine (May 28, 2015) (www.sandvine.com/pr/2015/5/28/sandvine-in-the-americas-netflix-google-facebook-the-internet.html).

² *The Algorithms Are Taking Over: Who Controls Our Online Future?*, Forbes (Jan. 2, 2016) (www.forbes.com/sites/kalevleetaru/2016/01/02/the-algorithms-are-taking-over-who-controls-our-online-future/#7c2ea7d022b0).

is presented has been shown to have a significant influence on consumer attitudes, preferences, and behavior.³

II. CURATING CONTENT

Determining what content to show or conceal from users in their social media feed or in search engine results is generally determined by automated systems using algorithms.⁴ Algorithms are sets of instructions telling a computer how to perform a task.⁵ Using machine learning, algorithms automatically learn and update themselves based on data collected over time from users.⁶ The use of machine learning allows for personalization of content for an individual based on that individual's interests and needs.⁷

Algorithms are written and maintained by humans.⁸ Because of this influence and because the algorithms are learning from collected data, researchers have found that algorithms are not necessarily objective.⁹ Dispassionate decisions by algorithms can lead to unintentional bias in curated online content.¹⁰ In addition, the personalization of content means that people

³ Robert Epstein and Ronald E. Robertson, *The Search Engine Manipulation Effect (SEME) and Its Possible Impact on the Outcomes of Elections*, Proceedings of the National Academy of Sciences (Aug. 18, 2015).

⁴ *The Problem with Silicon Valley's Playthings*, Slate (Nov. 7, 2017) (www.slate.com/articles/technology/technology/2017/11/those_disturbing_youtube_videos_for_kids_are_a_symptom_of_tech_s_scale_problem.html); *Something Really is Wrong on The Internet. We Should Be More Worried.*, Washington Post (Nov. 13, 2017) (www.washingtonpost.com/opinions/something-really-is-wrong-on-the-internet-time-to-fix-it/2017/11/13/4317a252-c89a-11e7-b0cf-7689a9f2d84e_story.html?utm_term=.4567a5f1b407).

⁵ *What's the Deal with Algorithms?*, Slate (Feb. 2, 2016) (www.slate.com/articles/technology/future_tense/2016/02/what_is_an_algorithm_an_explainer.html).

⁶ *Something Really is Wrong on the Internet. We Should Be More Worried*, Washington Post (Nov. 13, 2017) (www.washingtonpost.com/opinions/something-really-is-wrong-on-the-internet-time-to-fix-it/2017/11/13/4317a252-c89a-11e7-b0cf-7689a9f2d84e_story.html?utm_term=.4567a5f1b407).

⁷ *The Problem with Silicon Valley's Playthings*, Slate (Nov. 7, 2017) (www.slate.com/articles/technology/technology/2017/11/those_disturbing_youtube_videos_for_kids_are_a_symptom_of_tech_s_scale_problem.html);

⁸ *When Algorithms Discriminate*, New York Times (July 9, 2015) (www.nytimes.com/2015/07/10/upshot/when-algorithms-discriminate.html).

⁹ *Id.*

¹⁰ *Biased Algorithms Are Everywhere, and No One Seems to Care*, MIT Technology Review (July 12, 2017) (www.technologyreview.com/s/608248/biased-algorithms-are-everywhere-and-no-one-seems-to-care/).

may be seeing only content that they like and agree with and not content that contradicts or challenges their preferences.¹¹

III. MODERATING CONTENT

In addition to curating content presented to users, individual platforms police user content. Each platform decides for itself what policies to adopt when it comes to moderating content.¹² For example, some platforms remove content that poses a risk of physical harm or threatens public safety.¹³ Some platforms also prohibit the posting of private information without consent.¹⁴

Platforms use different tools to enforce these policies, including removing content, banning individual users, or referring matters to law enforcement.¹⁵ For some platforms, the decision to take action is made by employees of the platform based on internal company guidelines.¹⁶ Some platforms also provide a process to appeal their decisions when they remove content or ban users.¹⁷ Some have criticized platforms for inconsistently applying their content moderation policies and responding only to press reports or calls from public officials.¹⁸

IV. WITNESSES

The following witnesses have been invited to testify:

Omri Ben-Shahar

Leo and Eileen Herzel Professor of Law
The University of Chicago Law School

¹¹ *Bubble Trouble*, Slate (June 10, 2011) (www.slate.com/articles/news_and_politics/the_big_idea/2011/06/bubble_trouble.html).

¹² Platforms Decide Who Gets Heard, NiemanLab (Dec. 18, 2015) (www.niemanlab.org/2015/12/platforms-decide-who-gets-heard).

¹³ See, e.g., Community Standards, Facebook (www.facebook.com/communitystandards) (accessed Nov. 17, 2017) [hereinafter Facebook Standards].

¹⁴ See, e.g., Twitter Rules, Twitter (support.twitter.com/articles/18311) (accessed Nov. 17, 2017) [hereinafter Twitter Rules].

¹⁵ See, e.g., Twitter Rules, *supra* note 13; see also Facebook Standards, *supra* note 12.

¹⁶ See, e.g., *Facebook's Secret Censorship Rules Protect White Men from Hate Speech but Not Black Children*, ProPublica (June 28, 2017) (www.propublica.org/article/facebook-hate-speech-censorship-internal-documents-algorithms).

¹⁷ See, e.g., About Suspended Accounts, Twitter (support.twitter.com/articles/15790) (accessed Nov. 17, 2017).

¹⁸ *Twitter Is Still Dismissing Harassment Reports and Frustrating Victims*, BuzzFeed (July 18, 2017) (www.buzzfeed.com/charliewarzel/twitter-is-still-dismissing-harassment-reports-and?utm_term=.ruBB9D0rX#.vnp4GApQz).

Michael Kearns

Professor and National Center Chair
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