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TECH

Scrutiny Over Fake Accounts Turns From Facebook to Twitter

Users can remain anonymous, fueling legions of automated accounts, or bots, deployed to mislead and manipulate

Twitter said bots distributed misleading content about how to vote and attempted to influence the lists of trending topics to make certain ideas appear more popular. PHOTO: MATT ROURKE/ASSOCIATED PRESS

By Georgia Wells and Robert McMillan
Updated Oct. 2, 2017 6:45 p.m. ET

The openness and anonymity of Twitter Inc. TWTR **1.30%** ▲ that rocketed the short-messaging service to global fame are now landing it in trouble.

As Congress and others scrutinize Russia's alleged use of social media to influence the U.S. presidential election, one focal point is the prevalence on Twitter of bots, or automated accounts, that can be used to disseminate manipulative information.

Twitter doesn't require its users to provide identifying information, such as a name, mobile number or birthday, when setting up accounts. And Twitter makes it easy for third-party software to interact with its platform, enabling bots. Researchers say malicious actors exploit that anonymity to create legions of bots and flood the platform with an identical hashtag, or retweet of a post, which can artificially boost the popularity of a topic.

In presentations on Thursday to congressional investigators probing alleged Russian meddling in the U.S. election, Twitter said that bots distributed misleading content about how to vote and attempted to influence the lists of trending topics to make certain ideas appear more popular. Russia has denied meddling in the election.

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Nearly all of the 201 accounts Twitter found that were linked to Russian actors recently identified by Facebook Inc. FB **-0.82%** ▼ were bots, according to a person close to the matter.

Facebook said the accounts ran ads on its platform meant to sow political and social division during the election.

But the problem of hidden influence on Twitter is much greater than what the company identified last week, academics say. About 19% of the messages viewed by Twitter users

during the last month of the presidential campaign were generated by bots, according to a research paper by Emilio Ferrara, an assistant research professor with the University of Southern California. There were 400,000 bots sending political messages during the 2016 presidential election, Mr. Ferrara added.

Twitter says that some bots can be a problem. Since June, Twitter has detected an average of 130,000 accounts a day attempting to manipulate trending topics, and the company says it has taken steps to prevent the impact by identifying and suspending them. Twitter estimates that spam accounts represent fewer than 5% of its 328 million monthly users. Sam Woolley, a University of Oxford research associate who studies the role of political bots on social media, says that the number could be as high as 20%.

Researchers say Twitter doesn't catch all perpetrators. On Election Day, for example, suspected Russian bots caused the hashtag #HillaryDown to trend, and a group of Twitter bots posted the hashtag #WarAgainstDemocrats more than 1,700 times, says cybersecurity firm FireEye .
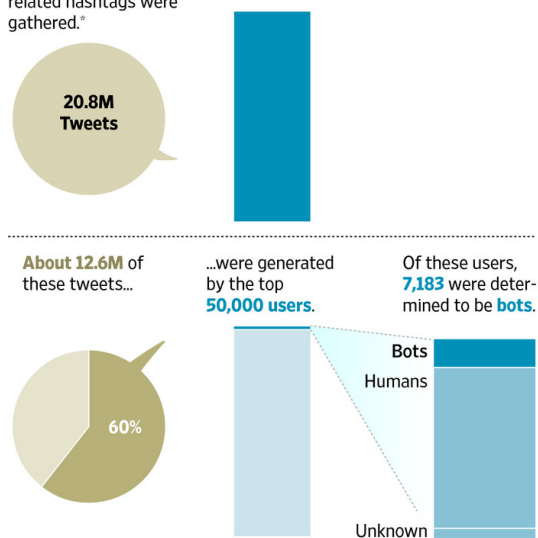
Twitter says researchers "systematically under-represent our enforcement actions" and don't take into account ways that Twitter limits "the visibility of low-quality content."

Artificial Discourse

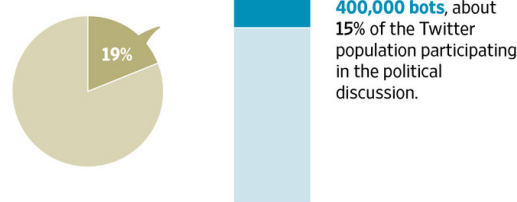Research illustrates the outsized effect of bots on political tweets during the 2016 race.

A sampling of **20.8M tweets** with election-related hashtags were gathered.*

These tweets were generated by **2,782,418 users**.

20.8M Tweets

About 12.6M of these tweets...

...were generated by the top **50,000 users**.

Of these users, **7,183** were determined to be **bots**.

60%

Bots
Humans
Unknown

Extrapolating for the entire sample

About **3.8 million** tweets...

...were generated by **400,000 bots**, about **15%** of the Twitter population participating in the political discussion.

19%

*Twitter Search API queries at regular intervals of 10 seconds, continuously and without interruptions in three periods between Sept. 16, 2016 and Oct. 21, 2016
Source: 'Social bots distort the 2016 U.S. Presidential election online discussion' by Alessandro Bessi and Emilio Ferrara, USC Information Sciences Institute

THE WALL STREET JOURNAL.

Mark Warner, a Virginia Democrat and the vice chairman of the Senate Intelligence Committee, criticized Twitter for only presenting a small set of accounts with Russian links and said Twitter hadn't done enough to examine the extent of Russian activity on its platform. Twitter said Russia and other former Soviet countries have been the source of automated and spam accounts for many years.

Twitter isn't the only social network contaminated by bots. Facebook is home to bots posing as people's friends, and automated accounts on Reddit vote up posts to make them seem more popular.

Twitter encourages its users to build software that automatically broadcast information and send replies on the platform, such as weather data and RSS feeds. Companies such as news organizations including The Wall Street Journal sometimes use bots on Twitter to post headlines, and organizations and individuals create bots to offer helpful information, such as earthquake activity in the San Francisco area.

But the abuse wrought on the social network by the malicious accounts is a problem that the company is only beginning to understand, according to sources familiar with the

company.

"We've been fighting against these issues for years, and as long as there are people trying to manipulate Twitter, we will be working hard to stop them," Twitter said in a statement on Thursday.

In many ways Twitter has built the perfect tool for the kind of "influence operations," allegedly directed at U.S. voters during the 2016 election, said Thomas Rid, professor of strategic studies at Johns Hopkins University.

"You have a platform that allows you to create completely machine-run automated accounts and let them pretend to be actual human beings," said Mr. Rid. "And at the same time you have all of the opinion makers and opinion leaders—the most important target audience—on the same platform."

The U.S. isn't the only target in these campaigns. In a study of Russian accounts tweeting frequently about politics in 2014 and 2015—when Russia's clash with Ukraine was the dominant news story—a "significant portion" of them were bots, according to Professor Joshua Tucker and colleagues at the Social Media and Political Participation lab at New York University.

The bots tweeted both in support of the Kremlin and Russian opposition. Their findings are the subject of a coming paper in the academic journal Big Data.

But Twitter says manipulative tweeting by humans is a new problem. "We've identified new and emerging challenges dealing with non-automated content—i.e., human-directed accounts instead of bots—that coordinate their activities to spread information," Twitter said in its statement Thursday. It added that the human spammers are harder to identify than bots.

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Corrections & Amplifications
About 19% of the messages viewed by Twitter users during the last month of the presidential campaign were generated by bots, according to a research paper. An earlier version of this article incorrectly said it was 20%. (Oct. 2, 2017)

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