Facebook's Female Engineers Claim Gender Bias

 $\frac{https://www.wsj.com/articles/facebooks-female-engineers-claim-gender-bias-1493737116?reflink=desktopwebshare permalink}{}$

Updated May 2, 2017 at 3:16 pm ET

- Last year, a longtime engineer at Facebook Inc. gathered data that revealed a controversial finding: Code
 written by women was rejected much more frequently than code written by their male colleagues,
 according to people familiar with the matter and screenshots of internal discussions viewed by The Wall
 Street Journal.
- The outcry prompted senior Facebook officials to conduct their own review of the engineer's study. In an internal post published a month later, Jay Parikh, Facebook's head of infrastructure, attributed any gap in rejection rates to an engineer's rank, not gender. Many employees interpreted this new analysis as a sign that female engineers weren't rising at the same rate as men who joined the company around the same time.
- In a statement to the Journal, a Facebook spokeswoman described the initial analysis as "incomplete and inaccurate—performed by a former Facebook engineer with an incomplete data set." The spokeswoman confirmed Mr. Parikh's analysis, which was based on confidential data unavailable to most employees. The spokeswoman added that there aren't enough women at senior engineering levels at Facebook and across the technology industry.
- Like other major tech companies, including Google parent <u>Alphabet</u> Inc. and <u>Apple</u> Inc., <u>Facebook</u> has struggled to increase the share of women and underrepresented minorities in its ranks.
- The code shapes the user's experience, and experts say the absence of diverse viewpoints on a coding team can lead to a product ignoring the needs of certain categories of users.
- The initial analysis found that female engineers received 35% more rejections of their code than men, according to screenshots of the engineer's report posted last September. The engineer, who was described as having been at Facebook several years, said she conducted her analysis "so that we can have an insight into how the review process impacts people in various groups," according to screenshots of her internal post.
- Women also waited 3.9% longer to have their code accepted, and got 8.2% more comments and questions, according to the analysis.
- Experts and former employees say both studies had flaws. The first may not have taken into account an engineer's previous experience before joining Facebook, while the official analysis failed to offer enough data to conclusively rule out gender bias.

★☑ Instagram Saps Snap and Flatters Facebook

https://www.wsj.com/articles/instagram-saps-snap-and-flatters-facebook-1493758248?st=vi8t1621s7ivcel&reflink=desktopwebshare permalink

May 2, 2017 at 4:50 pm ET

- The social network's shares have surged 33% so far this year. Already <u>a digital-advertising</u>
 <u>powerhouse</u>, Facebook is now benefiting from <u>sharpened focus</u> on its photo-sharing app
 Instagram.
- But the positive news surrounding Instagram, particularly as it relates to
 rival <u>SnapSNAP 0.88%increase</u>; <u>green up pointing triangle</u>chat parent Snap Inc., is what has
 investors excited. Facebook doesn't break out Instagram results specifically, but it recently noted that
 the app has more than <u>700 million total users</u>, doubling its user base in two years with growth
 accelerating recently. And "<u>Instagram Stories</u>," a direct competitor to Snapchat launched last
 summer, now has <u>200 million</u> daily active users, already surpassing those on Snapchat.
- Instagram gives Facebook yet another outlet to show its ads. The app is forecast to generate \$3.9 billion in global advertising revenue this year, a 106% increase from a year ago, according to eMarketer Inc. By comparison, Snap is only expected to generate \$1.03 billion in revenue this year.

- It isn't just Instagram that is thriving. Facebook's flagship app and Instagram, as well as Messenger and WhatsApp, were the four most-downloaded apps in the first quarter, according to Anthony DiClemente, an analyst at Nomura Instinent. Snapchat was a distant fifth as Instagram's lead expanded.
- Granted, there are risks. The social network is counting on growth from video with hopes of winning over traditional television advertising dollars. That is no sure thing, particularly as the company grapples with violent videos and fake news.

After Posting of Violent Videos, Facebook Will Add 3,000 Content Monitors

https://www.wsj.com/articles/zuckerberg-says-facebook-will-add-3-000-people-to-review-content-after-violent-posts-1493822842?st=auigh36vj5wigff&reflink=desktopwebshare_permalink

Updated May 3, 2017 at 4:05 pm ET

- Facebook Inc. said it would hire 3,000 more staffers to review content in an attempt to curb violent or sensitive videos on its site without scaling back its live-streaming tools.
- Mr. Zuckerberg's proposed fix, which would increase Facebook's roster of 4,500 reviewers by two-thirds
 over the next year, addresses the amount of time it takes Facebook to remove graphic content, as
 opposed to preventing its site from being used to display such content.
- The new steps nudge Facebook toward a more active role in policing its site, including being able to stop incidents before they happen.
- Facebook will still rely on its vast user base to report and flag content, but it is likely to be able to respond more quickly to flagged content with its bulked up team. Mr. Zuckerberg noted that Facebook will continue forging relationships with local officials and will alert them if reviewers sense a user is about to cause harm to him or herself or others.
- Mr. Zuckerberg also said Facebook would make it easier for users to report problems to the company so
 reviewers can more quickly determine if a post violates its standards. The company is also <u>investing</u>
 <u>in artificial intelligence</u>, in hopes that AI can one day detect violence as it is unfolding, but that
 technology is a long way off.
- Meanwhile, it could be a challenge for Facebook to ramp up its content moderation team to 7,500. Most reviewers are contractors, not full-time employees, and burnout is high, experts and former workers say. A small subset of workers manage live videos.

Facebook's Social Climbing Has Its Price

https://www.wsj.com/articles/facebooks-social-climbing-has-its-price-1493849742?st=w1uglw8k4xk96l1&reflink=desktopwebshare_permalink

May 3, 2017 at 6:15 pm ET

That sets a big target for what is now the world's fifth most valuable company to hit. Investors also seem
to have conveniently ignored company warnings about slowing growth ahead. Facebook's recent efforts
to address the broadcast of heinous material on its network highlight another challenge that comes
along with its enormous size.

Facebook Revenue Surges, Fueled by Mobile

https://www.wsj.com/articles/facebook-revenue-surges-fueled-by-mobile-1493842875?st=dygzsh5lc6ld3ul&reflink=desktopwebshare_permalink

Updated May 3, 2017 at 7:33 pm ET

- Facebook Inc. continues to sweep digital advertising, alongside rival Google, despite unrest among marketers about how their advertising is handled.
- Facebook and Google dominate the online advertising market. The two tech giants snatched 99% of the
 online-ad industry's revenue growth last year, estimated Pivotal Research analyst Brian Wieser using
 data published by the Interactive Advertising Bureau. Facebook holds 16% of the global digital-ad
 market, behind Google's 33% share, says forecasting firm eMarketer.

- Marketing executives "acknowledge they're concerned about fake news and the problems Facebook has had with live video," said eMarketer principal analyst Debra Aho Williamson. "They're concerned that at some point this will affect users—but they haven't seen that yet. So that's why spending keeps going up."
- But advertisers aren't entirely sold on Facebook's nascent video-ad products. Facebook's video product
 remains "uncertain ground," according to a new report by GroupM, the ad-buying unit of WPP PLC. For
 every 20 video ads served in the news feed, just one was watched for 10 seconds or longer and three
 watched for at least three seconds, the report said.
- But demand for Facebook ads isn't expected to decline anytime soon. According to a RBC Capital
 Markets survey, 65% of advertisers buying Facebook ads plan to spend even more. Nearly 40% told RBC
 that they spend more than a fifth of their online budgets on the social network, up from 31% in February
 2016, according to the survey published in late March.

Facebook Fake News Fight Moves to U.K. Elections

https://www.wsj.com/articles/facebook-runs-ads-to-help-users-spot-fake-news-1494253061?reflink=desktopwebshare permalink

Updated May 8, 2017 at 1:53 pm ET

- Facebook Inc., criticized for not doing enough to curb misinformation during last year's U.S. presidential race, is trying to show it is making a more-concerted effort in the U.K. ahead of next month's general election.
- The social network on Monday ran advertisements in major British newspapers that offer tips for spotting false news stories. It also said it was working with third-party fact checkers to address misinformation, and that it recently removed tens of thousands of fraudulent Facebook accounts in the U.K. after improving ways to identify them.
- Facebook, meanwhile, had previously started rolling out in several countries a tool that marks stories as
 "disputed" and shows them less frequently on users' news feeds on Facebook when media
 organizations deem them false. Monday's moves in the U.K. take those efforts a step further ahead of
 the June vote.
- Facebook ran newspaper ads titled "Tips for spotting false news." Among the 10 suggestions: look closely at the web address, check whether photos were manipulated, inspect the article's date, make sure the story isn't satire and be skeptical of headlines.
- The moves represent the latest shift for Silicon Valley firms, which previously portrayed themselves as neutral technology platforms that should have no role in moderating the internet. That attitude changed after last year's divisive U.S. presidential election. Lawmakers and others criticized tech giants for election-news related hoaxes and misinformation that made it onto their sites.
- Measures like the ones Facebook are implementing here haven't provided a panacea, especially for misinformation spread on less-regulated websites.

Snap Fails First Test as Public Company

https://www.wsj.com/articles/snap-fails-first-test-as-public-company-1494454140?st=5928f2xa5928p95&reflink=desktopwebshare_permalink

May 10, 2017 at 6:09 pm ET

- The Snapchat parent reported its <u>first quarter of results as a public company</u>, and the news wasn't pretty. Snap's loss of \$2.21 billion on revenue of \$149.6 million was far below what analysts expected.
- The results were hit hardest by \$2 billion in IPO-related compensation expenses. But the more important metric was daily active user growth, which decelerated significantly year over year, marking Snap's fourth consecutive quarter of declines. Revenue fell from the previous quarter.
- The company has struggled to sustain its user growth as Facebook's Instagram has adopted many <u>features that imitate Snapchat</u>. Facebook added more daily active users in the past year than Snap has in its entire existence.

For its part, Snap said it was "just scratching the surface" in terms of its ability to <u>show more ads</u> to
users. But even if that is true, Twitter has shown that there is a limit to how effective that revenuegrowth strategy can be if user growth doesn't pick up.

Digital Media World Tries to Decode Facebook's Latest Algorithm Tweak

https://www.wsj.com/articles/digital-media-world-tries-to-decode-facebooks-latest-algorithm-tweak-1494456332?st=xjqud8atdqdlcom&reflink=desktopwebshare_permalink

May 10, 2017 at 6:45 pm ET

- In what Facebook described as an effort to surface fewer links to "low-quality web experiences," the company said Wednesday it will begin de-emphasizing links that drive people off Facebook to webpages with "little substantive content" and "a large number of disruptive, shocking or malicious ads." It may also prevent people from running ads on Facebook that drive users to those pages.
- The company gave few specifics about what, exactly, will lead to pages being demoted in the News Feed, but some publishers welcomed the move if it will help stamp out links to pages crammed with low-quality ads.
- But the news isn't good for everyone. For one, the sites that have figured out how to use Facebook to
 drive traffic to ad-heavy pages could see their business models broken. Some search-driven "content
 farms" have over the years had similar experiences when Google made changes to its search rankings
 and algorithm.
- The tweak could also have repercussions for the ad networks and companies that help place ads on those sites, potentially cutting off their ad inventory and revenue in the process. Publishers predict it could impact "content recommendation" networks specifically, which often place ads on the types of pages they believe Facebook is attempting to limit traffic to.

Snapchat Parent Posts Disappointing User Growth; Stock Plunges

 $\frac{https://www.wsj.com/articles/snapchat-posts-2-2-billion-loss-in-first-quarterly-report-stock-plunges-1494446940?st=3fcfyaj350gzw0g&reflink=desktopwebshare_permalink$

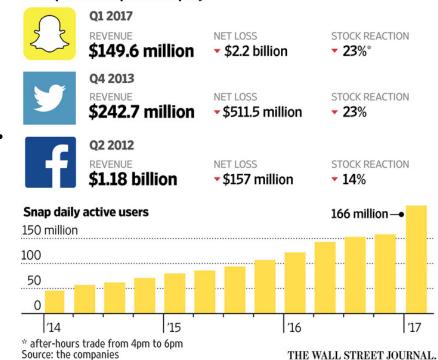
Updated May 10, 2017 at 10:58 pm ET

- Snap Inc., SNAP 0.88%increase; green up pointing triangle in its first quarterly report as a public company, showed it struggled to maintain strong user growth at its Snapchat vanishing-messaging app, sending shares tumbling and sparking worries about its ability to challenge social-media titan Facebook Inc.
- Meanwhile, Facebook's Instagram, a key competitor for Snap, last month said it has 200 million daily users of Instagram Stories, a feature of the photo-sharing app that mimics Snapchat's popular function.
- Investors have clamored for Snap since its initial public offering, the highest-profile tech listing in years. But the comparisons with Facebook and Twitter Inc.—its two biggest rivals—raise questions about whether Snap can elbow its way into a crowded social media market.
- Snap's traditional core of users are teens and young adults, a valuable demographic that marketers are eager to reach. Snap has pitched itself as an alternative to traditional forms of media, such as television, rather than a competitor to the bigger social-media networks.
- But Facebook has been nibbling away at the features that made Snapchat stand apart. Snap's "Stories" function—collections of Snaps that play in chronological order, and a critical place for Snap to display ads—has been imitated by Facebook and its other platforms.

Network Effect

How Snap stacks up against older rivals in their first quarters as listed companies

First quarter as a public company



- In a survey last month of 3,000 Americans conducted by Goodwater Capital, 25% of respondents said they prefer Stories on one of Facebook's platforms, compared with the 12% of users who said they prefer Snapchat's Stories.
- Snap has focused on users in more developed markets with the most ad dollars, leaving global ubiquity to the other social media giants to chase. That increases the pressure to make more money per user. In the first quarter, it rose to 90 cents, from 32 cents during the same period a year ago. As a comparison, Facebook made \$4.23 per user globally in the first quarter.

★☑ China Tells Facebook to 'Come Learn From Us' on Censoring Content

https://www.wsj.com/articles/what-facebook-could-learn-from-chinas-censors-1494514804?st=8hm0j9hxodoeofv&reflink=desktopwebshare_permalink

May 11, 2017 at 11:00 am ET

- Chinese social media cackled in response to the news, with many comments noting that China has
 plenty of censorship experience to offer. "Come learn from us," ran one post on the popular
 microblogging platform Weibo.
- There's a vast difference between trying to get rid of fake news and violent videos and the severe censorship imposed by an authoritarian government. Content banned in China goes beyond the violent and pornographic to include the politically unacceptable. China's sophisticated internet censorship system employs filtering technologies and squads of actual police and requires private companies to self-censor—or risk losing their business licenses.
- A Facebook spokeswoman says that the company remains interested in China and has yet to make "any decision on our approach to China."
- According to Chinese executives, effectively monitoring online content comes down to three things: lots
 of bodies and multiple layers of monitoring, plus the help of artificial intelligence.

- Facebook's announced total of 7,500 content reviewers may sound like a huge commitment of resources, but Chinese executives say it would be far from adequate to meet government standards in China.
- "If Facebook were in China, it would have to hire at least 20,000 reviewers for videos alone," says Feng Yousheng, Inke's founder and chief executive.
- Mr. Feng says Facebook would need many times more than that number if it had to police photos and text as Chinese social media do.
- Artificial intelligence offers a way to augment human monitoring. According to Douyu's Mr. Chen, the
 company's first layer of monitoring is image-recognition technology to screen pornographic and other
 problematic images. Douyu investor <u>Tencent Holdings</u> Ltd., a social media and gaming powerhouse,
 developed the technology for videos on its QQ and WeChat messaging platforms, which have 1.75
 billion active accounts combined—on par with Facebook.
- Tencent is working with Kneron, a San Diego, Calif., startup, to develop software that can detect
 emotions and behavior, according to Kneron founder Chunchen Liu, an AI scientist who has worked
 at Oualcomm and Samsung. Tencent declined to comment.
- With their greater experience, Inke's Mr. Feng says, perhaps Facebook should consider offshoring. "It can put its monitoring team in China. We can help. Their monitoring task is so much easier than ours," he says.

Facebook Fined by French Privacy Watchdog Over Data

https://www.wsj.com/articles/facebook-fined-by-french-privacy-watchdog-over-data-1494930268?reflink=desktopwebshare_permalink

Updated May 16, 2017 at 8:50 am ET

- France's privacy watchdog on Tuesday slapped Facebook Inc. with a €150,000 (\$165,616) fine on allegations the social media giant's privacy policy breaches French law, the latest setback for the company in Europe where it is hounded by multiple legal and regulatory battles.
- The size of the fine is comparatively small for Facebook, which brought in \$27.6 billion in revenue last year—almost all of which came from advertising. More important, however, the watchdog's decision could force changes to the way the company operates.
- Facebook has previously acknowledged that <u>it does collect data on users' internet browsing even when they aren't logged in</u>, through a snippet of computer code called a cookie that it places within an individual's web browser if they have visited the Facebook.com website. That "datr" cookie reports back to Facebook whenever that browser accesses a webpage with an active social plugin, such as a "like" button.
- But the French watchdog said Facebook's explanations to users didn't allow them to understand that their data was being collected as soon as they navigate to a third-party website.
- Facebook, <u>along with other U.S. tech giants</u>, <u>is battling a broadside of other legal and regulatory measures in Europe</u> that could threaten the way it does business here.

★☑ Facebook Refunds Some Advertisers After Finding New Measurement Bug

https://www.wsj.com/articles/facebook-refunds-some-advertisers-after-finding-new-measurement-bug-1494954000?st=ola0gr2zzrdi4km&reflink=desktopwebshare_permalink

Updated May 16, 2017 at 3:55 pm ET

• Facebook Inc. said it is issuing refunds to some advertisers after discovering a bug in its system that led it to overstate clicks on marketers' websites, a disclosure that comes as Madison Avenue is demanding better and more transparent measurement from the social network.

- Facebook says the bug affected advertisers specifically paying for ads that resulted in clicks to their
 websites. Over the period Facebook was monitoring, 0.04% of all impressions on the social network
 were impacted, the company said.
- Facebook's disclosure comes right in the middle of the annual U.S. television "upfront" season, when
 the biggest TV networks throw glitzy events and parties showcasing their programming in the hopes of
 securing billions of dollars in advertising commitments from marketers. It will play into the narrative
 among media executives that TV offers a safer and more predictable environment for
 marketers than digital platforms.
- Facebook has now acknowledged on five separate occasions since September that it has either
 overstated or understated the metrics advertisers and publishers use to get a sense of the effectiveness
 of their posts and ads on the platform. Until now, none of these publicly confirmed metrics errors had
 affected billing, although Facebook has issued some refundsto individual advertisers in the past for
 reporting bugs.
- Facebook in November launched a blog to provide updates on errors and bugs it comes across. The
 company also announced a measurement council, consisting of marketers and ad agency executives
 who provide feedback on how it is performing on the metrics front.
- In addition, Facebook has brought on board several new <u>independent measurement</u>
 <u>partners</u> since making the <u>disclosures about the mistakes</u> in its metrics. In February, Facebook
 committed to an independent audit by the Media Rating Council, an industry body that oversees
 measurement standards.
- One U.S.-based digital ad buyer said the latest mishap shows that while the social network has good
 intentions to improve on the measurement front, it could do better to get its strong engineering and
 sales teams on the same page.

▼ Facebook Slapped With EU Fine Over WhatsApp Deal

https://www.wsj.com/articles/facebook-slapped-with-eu-fine-over-whatsapp-deal-1495092109?reflink=desktopwebshare permalink

Updated May 18, 2017 at 2:27 pm ET

- Facebook Inc. was fined €110 million (\$122.7 million) by the European Union's antitrust regulator on
 Thursday for providing incorrect information or misleading authorities over the <u>acquisition of its</u>
 messaging unit WhatsApp, a warning shot to other companies registering their deals for review.
- The EU said Facebook inaccurately claimed during the merger review in 2014 that it couldn't routinely
 match Facebook and WhatsApp user accounts—something the company started doing two years later
 when it began combining user data across the services.
- The fine is manageable for Facebook, which brought in \$27.6 billion in revenue last year. But it is the latest of many legal and regulatory setbacks for the social-media company in Europe. On Tuesday, France's privacy watchdog <u>fined Facebook €150,000</u>, alleging the company isn't transparent enough with users about how it collects their data.

★☑ Facebook Embraces Esports in Its Video Strategy Shift

https://www.wsj.com/articles/facebook-embraces-esports-in-its-video-strategy-shift-1495099801?reflink=desktopwebshare_permalink

Updated May 18, 2017 at 5:07 pm ET

- Facebook Inc. is paying professional videogame teams and others in the esports industry to post videos on the social network, part of a shift in strategy to deliver more-premium programming to the company's nearly two billion monthly users.
- People scrolling through Facebook's news feed are more likely to watch polished videos with audio turned on, making them potentially lucrative vehicles for ads, analysts say. Such content increasingly will appear in news feeds over off-the-cuff live videos from users, as Facebook wants to be seen as a hub for long-form video.
- Esports marries Facebook's investments in sports and gaming.

- Under the deals signed with Facebook, esports partners must produce a minimum number of hours of
 video for the social network, and in most cases the partners are allowed to simultaneously publish to
 rival platforms such as <u>Amazon.com</u> Inc.'s Twitch. Financial terms weren't disclosed.
- The genre has a built-in fan base of millions who watch videos mainly on Twitch and <u>Alphabet</u> Inc.'s YouTube. In 2016, people watched 9.6 billion hours of live-streamed esports and other videogame content on those platforms, according to SuperData Research. The industry tracker projects that number to climb to 11.4 billion hours this year.
- Facebook is hoping more esports videos will help it develop such an ecosystem. The company plans to
 apply what it learns from its initial esports partners to develop new features for game broadcasters, said
 Leo Olebe, Facebook's director of global games partnerships.

☑ Facebook Tool Handles Media Companies' Video Ad Sales

https://www.wsj.com/articles/facebook-tool-handles-media-companies-video-ad-sales-1495551600?reflink=desktopwebshare permalink

May 23, 2017 at 11:00 am ET

- The new ad offering, called Audience Direct, will invite publishers to list video ad inventory for sale from across their properties, and to specify pricing.
- Marketers will then have the ability to log on to the system and to purchase ad space from specific publishers on a self-service basis, potentially streamlining the buying and selling process for both parties.
- Crucially, marketers can also specify which types of users they wish to display ads to, based on
 Facebook's mountain of user data. For example, an advertiser might purchase video ads on a specific TV
 network's website or app, but targeted only to women in a specific city
- Business terms are still evolving, but it is likely Facebook will take a cut of revenue from the transactions
 it helps facilitate. That could be a welcome revenue stream for the social network as it begins to reach
 capacity in the number of ads it can squeeze into users' news feeds.
- But Facebook is betting that the addition of its powerful targeting and tracking capabilities will make its offering more attractive for marketers, and potentially more lucrative and efficient for publishers.
- Mr. Boland said the Audience Direct tool will function separately from Facebook's existing Audience Network, a product that allows marketers to target specific groups of users across a wide range of websites and properties.
- "If you're an advertiser, you can buy from the Audience Network and reach audiences irrespective of the content they're on. But some marketers do want to buy specific publishers because context is important to them," Mr. Boland said.

Does Facebook Make Us Unhappy and Unhealthy?

https://www.wsj.com/articles/does-facebook-make-us-unhappy-and-unhealthy-1495729227?st=7e6pzhjpdnek18d&reflink=desktopwebshare_permalink

Updated May 25, 2017 at 12:40 pm ET

- Researchers found that the more people use Facebook, the less healthy they are and the less satisfied with their lives. To put it baldly: The more times you click "like," the worse you feel.
- The findings? Using Facebook was tightly linked to compromised social, physical and psychological health. For example, for each statistical jump (away from the average) in "liking" other people's posts, clicking their links or updating one's own status, there was a 5% to 8% increase in the likelihood that the person would later experience mental-health problems.
- Responding to the study, Facebook cited an earlier paper by a company scientist and Carnegie Mellon
 University Prof. Robert Kraut. "The internet's effect on your well-being depends on how you use it," the
 authors wrote. Participants who received more Facebook comments than average from close friends
 reported a 1% to 3% uptick in satisfaction with life, mood and social support, the study reported. It also
 acknowledged that it's hard to measure the emotional effect of the internet.

- In the last couple of months, two other studies have cast a negative light on the social-media use of teenagers and young adults. One, of 1,787 Americans, found that social media increased feelings of isolation; the other, of 1,500 Britons, found that the websites—image-based sites in particular—exacerbated feelings of anxiety and inadequacy.
- The bottom line, he says, is that replacing in-person interactions with online contact can be a threat to your mental health. "What people really need is real friendships and real interactions," he adds.

Instagram CEO on Stories: Don't Call It a Copycat

https://www.wsj.com/articles/instagram-ceo-on-stories-dont-call-it-a-copycat-1496145603?st=a91tdh8ewmmxzx8&reflink=desktopwebshare_permalink
Updated May 30, 2017 at 11:43 am ET

- It's not that Mr. Systrom doesn't think <u>Snap</u> Inc. <u>SNAP 0.88%increase</u>; <u>green up pointing</u> <u>triangle</u> deserves credit. The chief executive and co-founder of Instagram, the app owned by Facebook Inc., readily says that Snap is responsible for coming up with popular formats like Stories, where users can post photo- and video-montages that vanish after 24 hours.
- Instagram introduced its own version of Stories last August, part of a broader effort to hold its ground among teens and millennials, a lucrative demographic that is becoming harder to reach over traditional media channels.
- Mr. Systrom says he understands the critics, but he disagrees with the idea that Instagram's embrace of
 emerging features is untoward. Execution matters more than originality, he says. What critics call
 copying, Mr. Systrom calls competition.
- The thing that I'm learning that has surprised me the most is you have a window of relevance and unless you reinvent yourself within that window of relevance, you die. I call it "success syndrome," where you're successful, you do all the things that made you successful and you keep doing those things thinking that that's why you're going to be successful in the future. Things change.
- The first decision was to focus on a problem we had heard from people directly, which is, "I feel like this photo isn't good enough to share on Instagram." Focusing on high-end highlights is wonderful and, honestly, it makes Instagram, Instagram. But just by focusing on that, we're missing out on this tremendous wealth of moments in your life that could bring you closer to other people.
- Stories is definitely similar to Snapchat. I think anyone would say that. The first time you see a product show up somewhere else it feels a lot like copying but imagine a world where the only car was the Ford Model T. I'm really glad there are a lot of car companies producing different cars. Just because they have wheels and windows and AC doesn't mean that you're copying. You've got DreamWorks and Pixar and Disney, they're all doing computer-animated film. That doesn't mean they're copying each other. They're building upon a technology. I would just judge [Stories] based on how many people use it actively, which is over 200 million every day. It clearly provides unique value to people that they're not getting elsewhere.
- I have never had an instance where we've had to run anything by [Facebook] to get approval of anyone and that's the magic. We touch points on a bunch of really important things that I think help us move more quickly, but the product process is super independent. What makes it work is that independence and autonomy and, frankly, the enormous support on resources and coaching that Facebook has given.

☑ Five Reasons Stock Pickers Are Off to a Fast Start: Facebook, Amazon, Apple, Alphabet, Microsoft

https://www.wsj.com/articles/five-reasons-stock-pickers-are-off-to-a-fast-start-facebook-amazon-apple-alphabet-microsoft-1496914381?st=w0qoybo0h4qchta&reflink=desktopwebshare_permalink
Updated June 8, 2017 at 6:11 am ET

Those five stocks have accounted for 41% of the S&P 500's market-capitalization advance this year. Of
the 101 top-performing actively managed U.S. stock funds this year, 84 count two or more of those
technology firms in their top five holdings, according to MorningstarInc.

- While funds in the past have had large holdings of big tech firms, what's unusual about 2017 is that the
 biggest stocks are doing particularly well, meaning investors must make more outsize bets to beat their
 benchmarks.
- Yet gains by big tech companies have left some investors uneasy, concerned that prices have run up too far, too fast but also reluctant to pare holdings on the market's strongest performers. Facebook, Apple and Amazon all climbed at least 32% this year through May; Alphabet was up 25%, while Microsoft had tacked on 12%.
- The heady rally in technology and internet stocks is in some ways reminiscent of the dot-com bubble in the late 1990s, when the promise of the information superhighway translated into bullishness that ultimately imploded with excess.
- In the dot-com boom, as now, there was pressure on fund managers to place large bets in the technology sector to keep up.
- Fund managers say one difference between then and now is that firms like Amazon and Alphabet are more deeply entwined in the day-to-day lives of their customers, enjoy more of an edge over competitors and are expanding into more industries.
- The growth of large technology stocks this year is "obviously unsustainable," said Gavin Baker, manager of the \$15.1 billion Fidelity OTC Portfolio. But he said the group was hit hard in late 2016, creating a low starting point.
- Mr. Baker, whose fund is up 25% year to date, called Google, Amazon and Facebook artificial intelligence companies that he expects to expand over the next five to seven years.
- Stock pickers say one of the biggest threats Google, Amazon and Facebook are likely to contend with is
 new regulations targeting online privacy and the way customer data is collected and used. Investors also
 say that, while antitrust concerns are a risk, especially in Europe, there is no way to predict their timing
 or impact.

Watch Out for FANG Inc.

https://www.wsj.com/articles/watch-out-for-fang-inc-1497000604?st=r2wesnpexgfq00i&reflink=desktopwebshare_permalink Updated June 9, 2017 at 5:02 pm ET

- A rise in shares of Facebook, <u>Amazon.com AMZN 3.56%increase</u>; green up pointing <u>triangle</u>, <u>Netflix NFLX 1.89%increase</u>; green up pointing <u>triangle</u> and Google-parent Alphabet, commonly known by the acronym FANG, <u>has propelled the broader market rally</u> since the beginning of the year. A selloff in those stocks Friday suggests investors are starting to question whether the fundamentals support those gains.
- The four tech giants have added \$343 billion in market capitalization since the start of 2017, a gain of 27% versus a gain of 8.6% for the S&P 500. An increase of that magnitude should typically be underpinned by a big improvement in their earnings outlooks. Earnings expectations at Facebook, Netflix and Alphabet have risen year to date. Their stock prices have risen more.
- Indeed, if the four tech giants were one big company—let's call it FANG Inc.—that company's multiple would have risen to 39 times 2017 earnings estimates from 32 times 2017 earnings estimates at the end of 2016. At these levels, the stocks are vulnerable to an outsize reaction if earnings fall short or growth slows unexpectedly.
- Even separately, the stock prices and earnings estimates don't match. Earnings estimates for Facebook
 for this year and next are up 18% and 10%, respectively, since the beginning of this year. The company's
 shares are up an even greater 30%.
- The gains suggest momentum, rather than fundamentals, has increasingly been fueling the rise of the companies. And it could mean investors are taking on more risk than they bargained for.
- Investors have increasingly been treating these cyclical growth stocks like steady consumer staples companies, Goldman wrote in a research note Friday, citing their low volatility even relative to a historically calm market. "We believe low realized volatility can potentially lead people to underestimate the risks inherent in these businesses," the bank wrote.

How Facebook's Telepathic Texting Is Supposed to Work

https://www.wsj.com/articles/how-facebooks-telepathic-texting-is-supposed-to-work-1497182402?st=0xnsluhv1qf7y7o&reflink=desktopwebshare permalink

June 11, 2017 at 8:00 am ET

- You might've heard that Facebook Inc. is working on a way for you to message your friends and update your news feed...telepathically.
- Are the methods crazy? Yes. Do neuroscientists and engineers outside Facebook express extreme doubt
 this will succeed? Yes. Facebook doesn't care and is investing millions in research that could produce a
 consumer gadget.
- After I spoke with project members, based at Facebook's mysterious Building 8 incubator for moonshots, it became clear that the company's larger goal is to make a handful of long-term bets on technologies that could define the next era of computing.
- Messaging is just the beginning. Facebook isn't working on a brain implant—though <u>other Silicon</u>
 Valley giants are. The answer could ultimately be as simple as a headband.
- To pull it off, Facebook has enlisted a small in-house team, supplemented by 60 scientists and engineers
 from research institutions across the U.S., all receiving funding from Facebook. Their goal is to update an
 obscure, largely abandoned technology known as "fast optical scattering," aka "event-related optical
 signal." Basically, you shine a light through the head and into the brain, then measure the light reflected
 back.
- If you've ever pressed a flashlight into your hand and seen it glow, you know how light can make its way through human flesh. Facebook's researchers think they have a chance of success because they're developing sensors to identify the small number of photons that, after penetrating the skull and bouncing off a neuron, return to the detector instead of scattering in every direction.
- At Building 8, they're approaching this in a quintessentially Facebook way: by throwing artificial
 intelligence at it. Dr. Chevillet says that if he and his team can get enough data from the right parts of
 the brain, they could train a machine-learning algorithm that correlates neural activity with language to
 extract words from our heads. The method would be similar to how scientists train computers to
 understand spoken language.
- As risky as all this sounds, Facebook isn't just shooting in the dark. The research program at Building 8 is managed by Regina Dugan, who comes from the DOD's Defense Advanced Research Projects Agency by way of Google. The sizable project budgets come with strict two-year deadlines. Still, none of the tech giants who hire academics to research topics in their skunkworks have, to date, yielded much in the way of out-of-the-box breakthroughs.

★ Facebook Building Feature to Let Users Subscribe to News Publications

https://www.wsj.com/articles/facebook-building-feature-to-let-users-subscribe-to-news-publications-1497284642?st=e8iv4ses59453yu&reflink=desktopwebshare_permalink

June 12, 2017 at 12:24 pm ET

- The social-media giant is building a feature that would allow users to subscribe to publishers directly
 from the mobile app, according to people familiar with the matter. The feature, long-requested by
 publishers, is expected to roll out by the end of 2017, three of the people said.
- Many details remain up in the air, but discussions have centered around making the feature available
 only on stories published natively to Facebook through its Instant Articles product. Talks have also
 focused on how to structure the arrangement, with Facebook leaning toward a metered-payment
 model, which would allow users to read some articles for free each month before prompting them to
 pay, three of the people familiar with the matter said.

- Another point under discussion is how payments would be processed and whether Facebook would get
 a cut of the revenue. One model being looked at is to have Facebook take payment information but let
 publishers keep all the money, some of the people said.
- Publishers have long been frustrated by Facebook's outsized role in news dissemination and
 commanding presence in the digital advertising market. The dominance of <u>Alphabet</u>Inc.'s Google and
 Facebook in online advertising—they are expected to receive more than 60% of U.S. digital ad spending
 this year, according to eMarketer—is one reason many newspapers now see subscription growth as
 paramount.
- "Helping news publishers get paid for their digital content is arguably the most meaningful help that Facebook could provide to global journalism," said Jim Friedlich, chief executive of the foundation behind the Philadelphia Inquirer, which has lobbied Facebook hard for the initiative. "If Facebook truly creates a successful platform for the sale of news subscriptions at scale it will be a powerful and historic game changer for the news industry."
- He argued that such a change would likely be hugely beneficial to local and regional publishers "who
 have been less successful than national news enterprises in building revenue beyond print."
- But many publishers found they weren't making as much money on Instant Articles as on their own sites, due to Facebook's restrictions on the number and types of ads, according to a January report from Digital Content Next, a trade group for digital-content companies. Publishers are also experimenting with new rival offerings from Apple Inc. and Google.
- In response to mounting frustration and competition, Facebook eased some of its ad restrictions on Instant Articles. In April, it added a new tool so publishers could encourage readers to sign up for their newsletters. Facebook executives also warmed to the idea of driving subscriptions through Facebook and started working on a "payment system" more seriously, the people familiar said.
- One of the people familiar with the matter said Facebook is likely to allow users to read 10 articles free before prompting them to subscribe, mirroring the approach of news organizations like the New York Times and the Washington Post. This model is likely to be a point of contention between Facebook and publishers with stricter paywalls, including The Wall Street Journal and the Financial Times.

★ Facebook Boosts AI to Block Terrorist Propaganda

https://www.wsj.com/articles/facebook-boosts-a-i-to-block-terrorist-propaganda-1497546000?st=sffm6za6yf95m2q&reflink=desktopwebshare_permalink

Updated June 15, 2017 at 3:57 pm ET

- The social-media firm said Thursday that it has expanded its use of A.I. in recent months to identify potential terrorist postings and accounts on its platform—and at times to delete or block them without review by a human. In the past, Facebook and other tech giants relied mostly on users and human moderators to identify offensive content. Even when algorithms flagged content for removal, these firms generally turned to humans to make a final call.
- Companies have sharply boosted the volume of content they have removed in the past two years, but
 these efforts haven't proven effective enough to tamp down a groundswell of criticism from
 governments and advertisers. They have accused Facebook, Google parent <u>Alphabet</u> Inc. and others of
 complacency over the proliferation of inappropriate content—in particular, posts or videos deemed
 as <u>extremist propaganda or communication</u>—on their social networks.
- In response, Facebook disclosed new software that it says it is using to better police its content. One
 tool, in use for several months now, combs the site, including live videos, for known terrorist imagery,
 like beheading videos, to stop them from being reposted, executives said Thursday. The tool, however,
 doesn't identify new violent videos <u>like the Cleveland murder</u> that was posted on Facebook in
 April.
- Another set of algorithms attempts to identify—and sometimes autonomously block—propagandists from opening new accounts after they have already been kicked off the platform. Another experimental tool uses A.I. that has been trained to identify language used by terrorist propagandists.

- One factor in the changed approach, Facebook executives say, has been the improved ability of
 algorithms to identify unambiguously terrorist content in some cases, while referring other content for
 human review.
- Facebook has expanded its use of human reviewers to look at what executives say are difficult cases. In May, the company said it would add about 3,000 new moderators to its community operations team that takes down content that violates Facebook policies, expanding the team by two thirds. Across the company, Facebook says it has 150 people focused on counterterrorism as their core job.
- Social-media firms including Facebook, Yahoo Inc. and Twitter Inc. are adamant that they want to stamp
 out terrorism on their platforms—and already do a lot to remove such content. Twitter says it is
 expanding its use of automated technology to combat terrorist content, too. From July through
 December last year, Twitter said internal tools flagged 74% of the 376,890 accounts it removed.
- YouTube said Thursday that it uses automated software to block users from uploading videos that have already been flagged and removed from the site, adding that more than half of the content removed for terrorism in the last six months was removed at least in part using such technology.
- Along with Facebook, it is collaborating with the other social media firms on a shared database of
 previously identified terrorist imagery, first announced in December, which allows the companies to
 more quickly identify posts that use them. But the company doesn't use technology to screen new
 content for policy violations, saying computers lack the nuance to determine the difference between
 propaganda and newsworthy or religious speech in a previously uncategorized video.

Facebook Bug Exposed Names of Moderators to Suspected Terrorists

https://www.wsj.com/articles/facebook-bug-exposed-names-of-some-content-moderators-1497654598?reflink=desktopwebshare_permalink

Updated June 17, 2017 at 12:01 am ET

- Facebook Inc. inadvertently exposed the names of some moderators to suspected terrorists and other
 groups whose content the workers were tasked with reviewing, a flaw the company Friday said has been
 fixed.
- Facebook investigators believe suspected terrorists may have viewed the profiles of fewer than six workers, the spokesman said. According to the investigators, none of the cases involved suspected members of the terror group ISIS, the spokesman said.
- In response, Facebook made a number of changes to prevent workers' information from becoming
 available externally again. The company is also testing new accounts that won't require workers to log in
 with personal Facebook accounts.
- Facebook's previous attempts to replace humans with algorithms haven't always succeeded. In August, the company put an algorithm in charge of its "trending" feature, but within days the lists featured false stories and celebrity gossip in place of serious news.
- Currently, moderators do much of the work at Facebook deleting content deemed to be in violation of Facebook's terms of service, such as hate speech and child exploitation. In May, Facebook Chief Executive <u>Mark Zuckerberg</u> said the company would hire 3,000 more staffers to review content <u>in</u> an attempt to curb violent or sensitive videos.

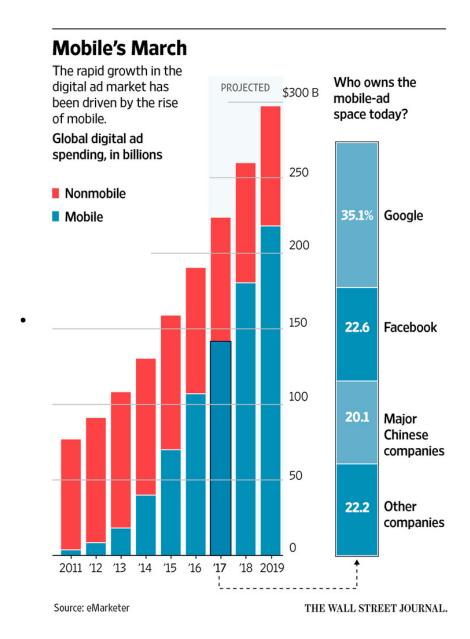
The Race Is On to Challenge Google-Facebook 'Duopoly' in Digital Advertising

 $\frac{https://www.wsj.com/articles/the-race-is-on-to-challenge-google-facebook-duopoly-in-digital-advertising-1497864602?reflink=desktopwebshare permalink}{}$

June 19, 2017 at 5:30 am ET



- The U.S. digital ad market grew by nearly \$12 billion last year, with Google and Facebook collecting 77 cents of each new dollar spent, according to eMarketer.
- Facebook Inc. and <u>Alphabet</u> Inc.'s <u>GOOG 1.60%increase</u>; <u>green up pointing triangle</u> Google tower so far above the rest of the digital advertising world that no company can claim the mantle of No. 3. But many are trying.
- Snapchat parent Snap Inc. believes it has the young eyeballs advertisers crave. Amazon.com Inc., ever the disrupter, has the ability to upend the whole business with its extensive data. <u>Verizon</u>
 <u>Communications Inc. is betting on its blend of web content, location data and ad technology</u> following the purchases of AOL and Yahoo, while <u>AT&T Inc. thinks buying Time Warner Inc. will give it an edge</u>.
- With the exception of Chinese internet giants Alibaba Group Holding
 Ltd., Baidu Inc.BIDU 0.40%increase; green up pointing triangle and Tencent
 Holdings Ltd., TCEHY 1.20%increase; green up pointing triangle which dominate their home market—where their Western rivals are restricted—none of the would-be challengers to the Google-Facebook "duopoly" even cracks a 3% share of global digital advertising.
- Many ad executives believe Amazon, which has expanded successfully beyond its core retail business into areas like streaming video and artificial intelligence, has the greatest chance of taking on the "duopoly."
- Amazon already allows marketers to place search ads on its website, as well as display
 ads on all its platforms. The company also built a tool that lets companies tap the e-commerce giant's
 data on its consumers' shopping habits in order to more efficiently place ads elsewhere on the web.
 And Amazon is helping publishers make more money from the adson their sites with a socalled "header bidding" product that gives multiple buyers a chance to bid on their ads at the same
 time.
- EMarketer predicts Amazon will generate \$1.81 billion in ad revenue world-wide in 2017, a tiny fraction of Google's \$74 billion. Amazon declined to comment.
- Snap is the newest contender for the third-place rosette. In 5½ years, <u>Snapchat has grown to 166</u> million active users—a mere blip compared with Facebook's 1.24 billion daily active users, though the gap is much narrower in strong ad markets like the U.S. and Canada.
- Snapchat's advantage is that its audience is mostly made up of the 18- to 34-year-old segment. On
 average, each Snapchatter spends more than 30 minutes daily in the app, giving advertisers lots of
 opportunities to target them. Snapchat has also brought on board several TV companies and publishers
 for the app's "Discover" section, offering marketers the opportunity to position their ads next to curated
 content.
- Snap's ad business still has some catching up to do: Its average revenue per user in North America in its first quarter was \$1.81, while Facebook clocked \$16.56 per user in the U.S. and Canada.



★ Facebook Has New Vision Beyond 'Connecting,' and It Thinks Groups Are Key

https://www.wsj.com/articles/facebook-sets-new-vision-for-next-decade-outlines-new-features-1498148171?reflink=desktopwebshare_permalink

Updated June 22, 2017 at 6:10 pm ET

- Over the next decade, Facebook's focus will be creating tools to build more community and bring the world closer together—a shift from its longtime motto "connect the world."
- Facebook executives have been contemplating the company's mission while dealing with several
 controversies, from criticism over its <u>perceived role in spreading misinformation</u> during the
 U.S. presidential election to its handling of violent live videos posted on the social network.
- He has traveled the U.S. to better understand how Facebook, founded in 2004, can help solve some of humanity's biggest problems, from terrorism to climate change.
- Facebook sees expanding Groups, a <u>seven-year-old product</u> that provides an online forum for
 people to discuss specific interests, as key. But the product has largely languished while other company
 services, such as Messenger, have racked up hundreds of millions of users.

- Mr. Zuckerberg has said 100 million Facebook users engage in Groups in a socially meaningful way, and that he wants to increase such membership to a billion within a few years.
- "Meaningful groups transcend online," Mr. Zuckerberg said in an interview. "Nothing beats a face-to-face connection" but online connections can fortify in-person ones, he added.
- Such moves, though, could raise thorny questions about privacy and Facebook's broadening reach into its users' lives.
- Facebookoutlined a raft of new tools to help people manage those groups and grow their audience. The
 company also is exploring various ways for group administrators to generate revenue from managing
 those forums.
- Verizon also is emerging as a "new" player, having just merged AOL and Yahoo to form an advertising and content unit of the company called "Oath."
- Mr. Armstrong believes the company can expand its reach to two billion people world-wide and ratchet up revenue to between \$10 billion and \$20 billion by around 2020. The recipe: ad technology it has spent years investing in, location data and well-known web brands including HuffPost and Yahoo Sports.
- Verizon's chief rival, AT&T, has its own lofty ambitions. AT&T CEO Randall Stephenson said at a conference in May that the Time Warner acquisition would create an entity that <u>delivers nearly</u> "one trillion" ad impressions a year. Mr. Stephenson said his company will be able to make money from Warner Bros. and Turner shows at a higher rate because it has data on AT&T subscribers' internet usage that can help marketers more accurately target their intended audiences.

Facebook Is Going Hollywood, Seeking Scripted TV Programming

https://www.wsj.com/articles/facebook-is-going-hollywood-seeking-scripted-tv-programming-1498388401?reflink=desktopwebshare permalink

Updated June 25, 2017 at 11:49 pm ET

- The social-networking giant is talking to Hollywood studios and agencies about producing TV-quality shows with an eye toward launching original programming by late summer, people familiar with the matter said.
- In meetings with major talent agencies including Creative Artists Agency, United Talent Agency, William Morris Endeavor and ICM Partners, Facebook has indicated it is willing to commit to production budgets as high as \$3 million per episode, people familiar with the situation say.
- The social network is guaranteeing creators of short-form fare a minimum \$5,000 to \$20,000 share of ad revenue per episode, a person familiar with the company's strategy said. Companies working on such content for Facebook include BuzzFeed, ATTN and Refinery 29, according to people familiar with the situation.
- The longer-form scripted shows on Facebook are expected to run no more than 30 minutes and will
 carry ads. A potential challenge for Facebook is Hollywood's desire to own much of its content. Typically,
 studios and producers effectively rent their shows to networks through licensing deals, and are reluctant
 to part with rights to shows in perpetuity.
- Facebook is expected to spread out the release of its episodes, in the traditional fashion, rather than
 dropping an entire season at one time, as Netflix and Amazon do, the people familiar with the matter
 say. Facebook sees its platform as an in-house water cooler of sorts, ideal for building a social
 community around shows.

★ Facebook Again Cuts Price of Oculus Rift VR Headset

https://www.wsj.com/articles/facebook-again-cuts-price-of-oculus-rift-vr-headset-1499670000?reflink=desktopwebshare permalink

July 10, 2017 at 3:00 am ET

• Facebook Inc. for the second time in 2017 is slashing the price of its Oculus Rift to jump-start sales after a rocky first year for the virtual-reality device.

- For the next six weeks, Facebook's Oculus VR unit will charge \$399 for the Rift, Touch motion controllers
 and some games. Previously, Oculus sold that bundle for \$598, itself a \$200 discount from their
 combined launch prices.
- The new, temporarily lowered bundle price doesn't account for the cost of buying a computer powerful enough to support the Rift. It does, though, put the price of owning the high-end headset on par with its toughest competitor, Sony Corp.'s PlayStation VR. That headset requires gamers to also buy a PlayStation 4 console, which runs anywhere from \$249 to \$399.
- The average number of Rift headsets sold each week went up after the first price cut, said Jason Rubin, head of content at Oculus. He said the company is lowering the price again to capitalize on a significant increase in recent months of the number of games and apps for the device. There are more than 700 today, up from roughly 400 in March.
- Virtual reality still doesn't have a breakout hit game or app, though, something analysts say is critical for broadening its appeal. Meanwhile, executives at large technology companies have shifted their focus in recent months to VR's cousin, augmented reality.

★ News Publishers Team Up to Take On Facebook, Google

 $\underline{https://www.wsj.com/articles/news-publishers-team-up-to-take-on-facebook-google-1499708353?st=rzhbw74ab1gjjez\&reflink=desktopwebshare_permalink}$

Updated July 10, 2017 at 8:48 pm ET

- Newspaper publishers are calling on Congress to allow them to negotiate collectively
 with <u>Alphabet</u> Inc.'s <u>GOOG 1.60%increase</u>; <u>green up pointing triangle</u> Google
 and Facebook Inc., as what they call the "digital duopoly" increasingly dominates online advertising and
 news distribution.
- The News Media Alliance—a trade coalition representing some 2,000 organizations across the U.S. and
 Canada, including Wall Street Journal publisher Dow Jones—says antiquated antitrust laws have had
 "the unintended effect of <u>preserving and protecting Google</u> and Facebook's dominant position,"
 by limiting publishers' ability to push for changes together.
- Federal antitrust law bars competitors from coordinating on business decisions and market strategy. If
 granted a limited waiver by Congress, the group said it would seek stronger intellectual-property
 protections, better support for digital subscription models and a fairer share of revenue and customer
 data.
- "Quality journalism is critical to sustaining democracy and is central to civic society," the alliance's president and chief executive, David Chavern, said in a statement. "To ensure that such journalism has a future, the news organizations that fund it must be able to collectively negotiate with the digital platforms that effectively control distribution and audience access in the digital age."
- The tech behemoths have made efforts to work more closely with publishers both large and small to address issues as the news industry transitions from print to digital.
- Antitrust exemptions generally are disfavored by the Justice Department and the Federal Trade Commission, which enforce U.S. antitrust laws. Proposed exemptions aren't usually embraced in Congress either, though there are exceptions.

★ Facebook to Show Ads on Messenger to Bolster Revenue Growth

https://www.wsj.com/articles/facebook-to-show-ads-on-messenger-to-bolster-revenue-growth-1499790600?reflink=desktopwebshare_permalink

July 11, 2017 at 12:30 pm ET

• Starting Tuesday, Facebook will show advertisements inside Messenger, the chat app that Facebook says is now used by 1.2 billion people every month. The ads will be shown between users' messages, similar

- to the way ads are sandwiched between posts in Facebook's news feed, the main scroll of pictures, videos and posts that greets everyone who uses the service.
- Facebook plans to roll out the ads "slowly and carefully" to Messenger's users, said Stan Chudnovsky, Messenger's head of product, replicating the strategy followed by its photo-sharing app, Instagram, which started showing ads to users in 2013 and took a couple of years to implement more widely.
- Facebook also has been studying ways to profit from WhatsApp, the company's other messaging app.
- Facebook is trying to make money from Messenger as <u>it braces for an expected slowdown in</u>
 revenue growth from news feed, the primary source of Facebook's revenue today, starting in mid 2017.
- Executives have told investors that Facebook would no longer increase the number of ads shown to users in the news feed. The increases helped juice revenue in prior years, but risked turning off users by jamming too many ads in their feeds.
- "We believe that messaging, it's one of the few things that people actually do more than social networking," Facebook Chief Executive Mark Zuckerberg said that year.
- Facebook could net an extra \$11 billion in revenue from the two messaging apps by 2020, Barclays Capital estimates.
- Advertisers can use Messenger ads in two ways: to drive traffic to their website or to open a messaging thread between the user and company. Facebook is urging advertisers to use Messenger ads to open a thread, where users can ask questions and seek advice about a potential purchase.
- "On Messenger, these ads open up a conversation and end up being higher converting for the advertiser," Mr. Chudnovsky said.

★ Can the Tech Giants Be Stopped?

https://www.wsj.com/articles/can-the-tech-giants-be-stopped-1500057243?st=d7dao8orfjmk7b8&reflink=desktopwebshare_permalink July 14, 2017 at 2:34 pm ET

- Sometimes it is hard to grasp how quickly the giant tech companies have come to dominate the world
 economy. Ten years ago, only one of them, <u>Microsoft</u>, was among the biggest companies in the world
 as measured by market capitalization. These days, the top five usually consists of <u>Apple</u>, Alphabet (the
 parent company of Google), <u>Amazon</u>, Microsoft and Facebook.
- It has been an astonishingly rapid rise for the tech giants, and it's far from over. The big question for the future is: How will their ever-expanding control affect other businesses and the labor market?
- In the decade ahead, the tech behemoths will use their dominance in artificial intelligence to overturn much of the service economy as well, including transportation, medicine and retail. With what result? To give just one example, Goldman Sachs recently reported that self-driving cars (a technology that both Google and Apple are developing) could eliminate as many as 300,000 jobs a year in two decades or more.
- At the Code Conference in California earlier this summer, the venture capitalist Marc Andreessen also rejected this "fallacy." "It's a recurring panic," he said. "This happens every 25 or 50 years. People get all amped up about 'machines are going to take all the jobs,' and it never happens."
- Leaving aside which side of this argument is correct, the fact is that we are rushing ahead into the AI universe with almost no political or policy debate about its implications. Digital technology has become critical to the personal and economic well-being of everyone on the planet, but decisions about how it is designed, operated and developed have never been voted on by anyone. Those decisions are largely made by executives and engineers at Google, Facebook, Amazon and other leading tech companies, and imposed on the rest of us with very little regulatory scrutiny. It is time for that to change.
- Who will win the AI race? The companies that are already in the forefront: Google, Facebook and
 Amazon. As AI venture capitalist Kai-Fu Lee <u>recently wrote</u> in the <u>New York Times</u>, "A.I. is an
 industry in which strength begets strength: The more data you have, the better your product; the better
 your product, the more data you can collect; the more data you can collect, the more talent you can
 attract; the more talent you can attract, the better your product."

- In mobile social networks, Facebook and its subsidiaries (Instagram, WhatsApp and Messenger) control 75% of the American market.
- This shift has brought about a massive reallocation of revenue, with economic value moving from the creators of content to the owners of monopoly platforms.
- The massive growth in revenue for the digital monopolies has resulted in the massive loss of revenue for the creators of content. The two are inextricably linked.
- This extraordinary duopoly is responsible in large part for the declining fortunes of journalism and other
 content creators, and such businesses are finally starting to fight back. In early July, the News Media
 Alliance, a group representing U.S. and Canadian newspaper publishers (including Dow Jones, publisher
 of The Wall Street Journal), <u>called on Congress</u> to allow them to negotiate collectively, as an
 industry, with Google and Facebook on issues of revenue, customer data and news distribution.
- Advertisers are critical not just of the duopoly itself but of the whole measurement system used by
 Google and Facebook to get paid. AdNews <u>recently reported</u> that the "viewability scores" for
 Facebook video ads are as low as 2% when compared with the standard used for TV ads. In other words,
 scrolling past an ad for as little as two seconds counts as a "view" for which Facebook charges, while for
 TV the whole 30-second ad must be viewed.
- This lack of transparency can also be seen in the proliferation of "fake news"—the deliberate spread, often with clear political aims, of online disinformation.
- Privacy is another issue that the revolution ahead will raise as never before.
- We shouldn't make too much of the fact that Alphabet <u>dropped Google's early motto</u> of "Don't be evil," but we still need to ask if the barons of Silicon Valley are considering the moral framework of the digital revolution. Too often it seems that the driving principle behind much of big tech's dominance of the economy is Ayn Rand's radically libertarian rallying cry, "Who is going to stop me?"
- Very few politicians have been willing to grapple with the possibility of mass unemployment caused by Al and robotics, but others see clear policy implications.
- The history of Silicon Valley itself offers some guidance here. The astonishing technological revolution of the past half-century would never have occurred without the impetus of three seminal antitrust prosecutions.

The Other 496 S&P Stocks

https://www.wsj.com/articles/the-other-496-s-p-stocks-1500213602?st=hfvoukh6b5asa0g&reflink=desktopwebshare_permalink July 16, 2017 at 10:00 am ET

- The total return of the S&P is 10.5% this year. Only three of its 11 sectors have done better: technology (home to Apple, Alphabet and Facebook), consumer discretionary (home to Amazon) and health care.
- The S&P 500 Growth index, which holds the S&P 500 stocks with the <u>fastest-growing sales and earnings</u>, and the greatest price momentum, has returned 15.1%. Amazon, Apple, Alphabet and Facebook count for nearly a fifth of its weight. The S&P 500 Value index—the yin to growth's yang—has underperformed.
- Of the four behemoths, only Apple has a dividend, and a rather scant one. No surprise, then, that the S&P High Yield Dividend Aristocrats index, which screens for companies that have consistently increased their dividends, has done poorly. The S&P 500 Equal Weight Index (which puts every stock on an equal footing rather than weighting by market size) has over time tended to outperform the S&P 500. But not this year. Midsize and small company shares, in both the growth and value categories, have also underperformed.
- So for almost any investors who adhered to any particular style, 2017 probably hasn't been so good. And unless they loaded up on the four stocks that happened to power the market higher, it hasn't been much of a year for stock pickers.

★ Facebook Launches News Analytics Tool in Partnership with Nielsen

https://www.wsj.com/articles/facebook-is-launching-a-new-analytics-tool-in-partnership-with-nielsen-1500490843?st=8swyo9mhue4f5bw&reflink=desktopwebshare_permalink

Updated July 19, 2017 at 4:22 pm ET

- In its continuing efforts to sell publishers on the benefits of Instant Articles, Facebook Inc.is launching a
 new analytics tool in partnership with Nielsen that will give news outlets more data on how their stories
 perform on the platform.
- Facebook also confirmed it is working on a subscription feature that would allow publishers to charge for access to their articles. The paywall product, <u>first reported</u> by The Wall Street Journal in June, will be available through Instant Articles starting in October. The paywall will likely kick in after a user reads 10 articles in a month, a person familiar with the matter said. The feature will be tested with a small group of publishers to start.
- The new tool will now <u>allow publishers</u> to see how their specific news organizations' stories perform on Instant Articles collectively, enabling them to compare against those posted using traditional links sending readers to a mobile webpage.
- Kim Lau, vice president of digital and head of business development at the Atlantic, which posts almost all its stories on Facebook using Instant Articles, said the move wasn't necessarily a game changer, but was a positive sign Facebook was trying to better accommodate publishers.
- But many publishers have been wary about how much content to post through the program, expressing
 concerns about becoming more deeply reliant on Facebook for traffic and having less access to
 information about their readers.
- Some publishers have also complained that given the limitations on the number and type of ads
 initially placed on stories posted on Instant Articles, they saw less money coming in compared with what
 they got through direct visits to their sites. Facebook has since eased the restrictions, which some say
 has improved the situation.

'Neutrality' for Thee, but Not for Google, Facebook and Amazon

https://www.wsj.com/articles/neutrality-for-thee-but-not-for-google-facebook-and-amazon-1500591612?st=me7vtw7yi6ol69v&reflink=desktopwebshare_permalink

July 20, 2017 at 7:00 pm ET

- Google, Facebook and dozens of major internet companies <u>joined forces</u> last week for a "Day of Action" to rally support for "net neutrality." That's the idea that everything on the internet—email, ecommerce transactions, cat videos and so forth—must travel at the same speed and under the same conditions.
- Both sides, including broadband providers, agree that no one should selectively block websites or chop the internet into fast and slow lanes. But lost in the debate is that companies like Google and Amazon, which cry out in favor of a neutral web, are virtual monopolies built on the same practice of prioritizing that they publicly decry.
- Since the birth of broadband, net neutrality's cheerleaders have feared that service providers might begin to act as the internet's "gatekeepers," undermining its inherent free-for-all character. But cyberspace's dirty secret is that the gatekeepers aren't the broadband providers lampooned by the likes of John Oliver. The real distortions come from massive "platform monopolies" like Google, Facebook and Amazon, whose proprietary algorithms decide what users see online.
- But for the internet giants there is enormous money at stake. Facebook and Google alone already <u>earn</u> more from advertising than every newspaper, magazine and radio station in the world combined.

 America needs a fair and open internet ecosystem. Allowing Google, Facebook and the like to prioritize, discriminate and mine users' data at will threatens democracy and makes the internet neither open nor free. Let's not let these monopolists hide behind the slogan of "neutrality."

Facebook Earnings Preview: What to Watch

https://www.wsj.com/articles/facebook-earnings-preview-what-to-watch-1501063200?reflink=desktopwebshare permalink

July 26, 2017 at 6:00 am ET

- Macquarie Research expects Facebook's ad revenue growth in 2017 will shrink to 36% while operating expenses will rise 44%.
- NEW AREAS OF AD GROWTH: Investors are eager for details about Facebook's growth plans beyond the news feed. "It increasingly feels like Facebook is under some pressure to find its next leg of growth," said MoffettNathanson analyst Michael Nathanson in a recent note. Facebook has made some moves on that front. This month, it started showing ads in its Messenger chat app and testing ads in Marketplace, a Craigslist-like feature in the core Facebook app. Facebook has also been testing "ad breaks" in the middle of Facebook videos and ramping up ads in its photo-sharing app Instagram. But analysts say it remains to be seen if these new ads can command news-feed level prices.

Facebook: Enjoy Rapid Growth While It Lasts

https://www.wsj.com/articles/facebook-enjoy-rapid-growth-while-it-lasts-1501108186?reflink=desktopwebshare_permalink

July 26, 2017 at 6:29 pm ET

- Facebook is as popular as ever. That may be making it a little harder for it to impress its friends.
- Some 66% of Facebook's monthly active users continue to visit it daily. But while 45% top-line growth
 from a year earlier and 24% growth in average revenue per user would be impressive for almost any
 company, those figures represented Facebook's slowest growth since the third quarter of 2015. Growth
 in daily and monthly active users also slowed sequentially.
- The slowdown matters because Facebook's shares have shot up 44% since the beginning of the year, outperforming its Big Tech peers. High expectations already are priced in, which makes it harder for the company to exceed them each quarter. This is particularly true as Facebook's user growth slows. New users tend to come from parts of the world outside the U.S., which makes them less valuable from the standpoint of advertising.
- The dynamic—and the fact that Facebook plans to stop inserting more ads in users' feeds—heightens
 the pressure on the company to generate more revenue from existing users with new ad formats,
 including video. It also must begin generating revenue from its Messenger and WhatsApp platforms.
 Facebook <u>started showing ads</u> in Messenger this month, and Chief Executive <u>Mark</u>
 <u>Zuckerberg</u> said Wednesday that he wants the company to move faster on monetizing the two apps.
 But Chief Operating Officer Sheryl Sandberg emphasized that it was still early days for generating
 revenue from Messenger.

What Marketers Should Note From Facebook's Second-Quarter Earnings

https://www.wsj.com/articles/what-marketers-should-note-from-facebooks-second-quarter-earnings-1501109733?st=voji3u293ifzpet&reflink=desktopwebshare_permalink

July 26, 2017 at 6:55 pm ET

• Daily active users grew 17% during the second quarter to an average of 1.32 billion. For marketers looking to reach as many people as possible, that's a mighty big number. For context, rival social media outfit Snap said it attracted 166 million daily active users in the first quarter.

- Facebook is beginning to introduce ads in its messaging products, but that's early days. First, the company is focused on driving successful "organic" interactions between businesses and consumers on its messaging platforms, Mr. Zuckerberg said.
- If businesses find that Facebook's messaging platforms (such as Facebook Messenger and WhatsApp) prove a valuable and lucrative way to interact with customers, they're likely to place more emphasis on them compared with non-Facebook channels like their own websites, Mr. Zuckerberg said. That will generate monetization opportunities for Facebook down the line, of course.
- Facebook has been talking about selling real-world outcomes to marketers instead of just ad
 impressions for years now, but the message is becoming clearer: Facebook is confident in its ad products
 and wants marketers to pay for results. Given that Facebook knows exactly who are, it's in a strong
 position to help connect those dots.
- "For too long our industry has been focused on proxy metrics, but what really matters is when you see an ad and you buy a product. The more we can tie ad viewing to sales, the stronger our case is with our clients," said Sheryl Sandberg, Facebook's chief operating officer.

Facebook Searches for New Ad Slots as Profit Spikes 71%

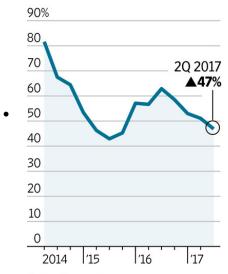
https://www.wsj.com/articles/facebook-profit-jumps-71-1501100844?st=z2lmajvuxrsl69t&reflink=desktopwebshare_permalink

Updated July 26, 2017 at 8:39 pm ET

- Facebook Inc.'s news feed is running out of room for advertisements, but the social media giant is making up for it with higher prices and new slots for ads in videos and its messaging apps.
- The company on Wednesday said profit spiked 71% in the second quarter. While growth is still rapid,
 Facebook warned that the number of ads in the news feed—its primary source of revenue—is hitting a ceiling.
- Facebook and Google revamped advertising by making digital the dominant platform over the past decade. Google, part of Alphabet Inc., and Facebook together accounted for 99% of the online ad industry's growth last year, according to Pivotal Research. But now both tech giants are trying to figure out the next generation of online advertising.
- Google said <u>earlier this week</u> that it is serving up more ads on smartphones and on YouTube, its video platform. While the newer ad formats drove a 52% surge in the number of clicks, they are less lucrative than search ads, Google's legacy business.
- Facebook, meanwhile, is looking beyond the highly profitable news feed to the rising consumption of video and its two chat apps, Messenger and WhatsApp, for growth.

Slowing Down

Facebook's ad revenue, change from a year earlier



Source: the company

THE WALL STREET JOURNAL.

- That shift isn't without risk to Facebook. These emerging ad formats don't earn Facebook as much
 money as ones shown in its news feed, executives said. They also need tobuild new types of ads that can
 work outside the standard stream of posts that make up Facebook's news feed and its photo-sharing
 app Instagram, which together drive nearly all of the company's revenue.
- Showing too many ads could turn off themore than two billion people who check Facebook at least once a month. Today, one of every seven to 10 posts is an ad in Facebook's news feed, said Jan Dawson, senior analyst with Jackdaw Research.
- The company is buying original video programming—some shows as long as 30 minutes an episode—
 that could in turn offer opportunities for advertising as part of Mr. Zuckerberg's broader desire to
 transform Facebook into a "video-first" company. "Video is part of what's going to expand the inventory
 of ads on Facebook," Mr. Dawson said. "A half an hour of video is potential for more ads."