

**KALEIDA**

# THE PUBLISHER'S DILEMMA

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# WHAT THE DATA SAYS ABOUT THE FUTURE OF NEWS



# INSPIRED BY OUR WORK AT THE GUARDIAN



**Graham Tackley,  
CTO**

Graham led architecture and digital development at The Guardian where he built the API and Ophan, the in-house realtime analytics tool.



**Matt McAlister,  
CEO**

Matt led digital at The Industry Standard and InfoWorld, developed APIs and platforms at Yahoo! and The Guardian, and started new co's such as Contributoria and Publish.org.



**Rev Dan Catt,  
Data Scientist**

Dan was a founding member of the Flickr team. He then worked at The Guardian for several years inventing new journalism tools. He is also an artist and maker of things.



**Dean Vipond,  
Product Designer**

Dean led product design at Contributoria and is cofounder of Publish.org. He has worked with Orange, BBC and British Airways.



**Chris Moran,  
Advisor**

Chris is responsible for audience development at The Guardian where he co-developed Ophan with Graham.



Kaleida dashboard interface showing analytics and news stories.

**Home** Live Dashboard Publisher Analysis Demographic Insights Sign in

### Your map to the world's ideas

Type in a subject

Popular today Syria Jacinda Ardern John F. Kennedy

Articles	Subjects	Engagements
1,419,335	229,081	2,142,615,776

Join Kaleida's new **Referral Traffic Research** project. We are studying referral traffic patterns across the European media ecosystem. All news publishers are invited to participate. Get the results early and free access to our new tools. Learn more here: <https://survey.kaleida.com/>

#### What matters to people right now

↓ 1,157	Donald Trump
↓ 887	United States
↓ 340	David Johnson (running back)
↓ 277	Democratic Party (United States)
↓ 270	United Kingdom
↓ 245	Niger
↓ 225	Washington (state)
↓ 221	John McCain

#### Biggest news stories today

Fox News	Body of missing Texas girl, 3, believed found, Texas police say	20 hours ago · 43,713 engagements (12 per min) · source
The Washington Post	McCain hits Trump where it hurts, attacking 'bone spur' deferments in Vietnam	14 hours ago · 36,811 engagements (34 per min) · source
New York Times	E.P.A. Cancels Talk on Climate Change by Agency Scientists	a day ago · 36,068 engagements (35 per min) · source
CNN	John McCain appears to mock Trump's draft deferments	14 hours ago · 31,885 engagements (33 per min) · source
HuffPost	John McCain Slams Wealthy Draft Dodgers In Apparent Swipe At Trump	14 hours ago · 27,552 engagements (21 per min) · source

#### Kaleida Research and Market Analysis

**Download Kaleida's latest research report**  
Read about how traffic to news events compares to opinion pieces, the size of the referral traffic market in France, the importance of promoting articles, and more [Read more](#)

**The gradual decline of engagements for news**  
The top 10% of articles earned nearly 18% fewer engagements from month-to-month. [Read more](#)

**Calculating the value of a Facebook partnership**  
How much is referral traffic worth? And how do we know? [Read more](#)

Get the Emerging Topics bulletin sent to you daily

Email address

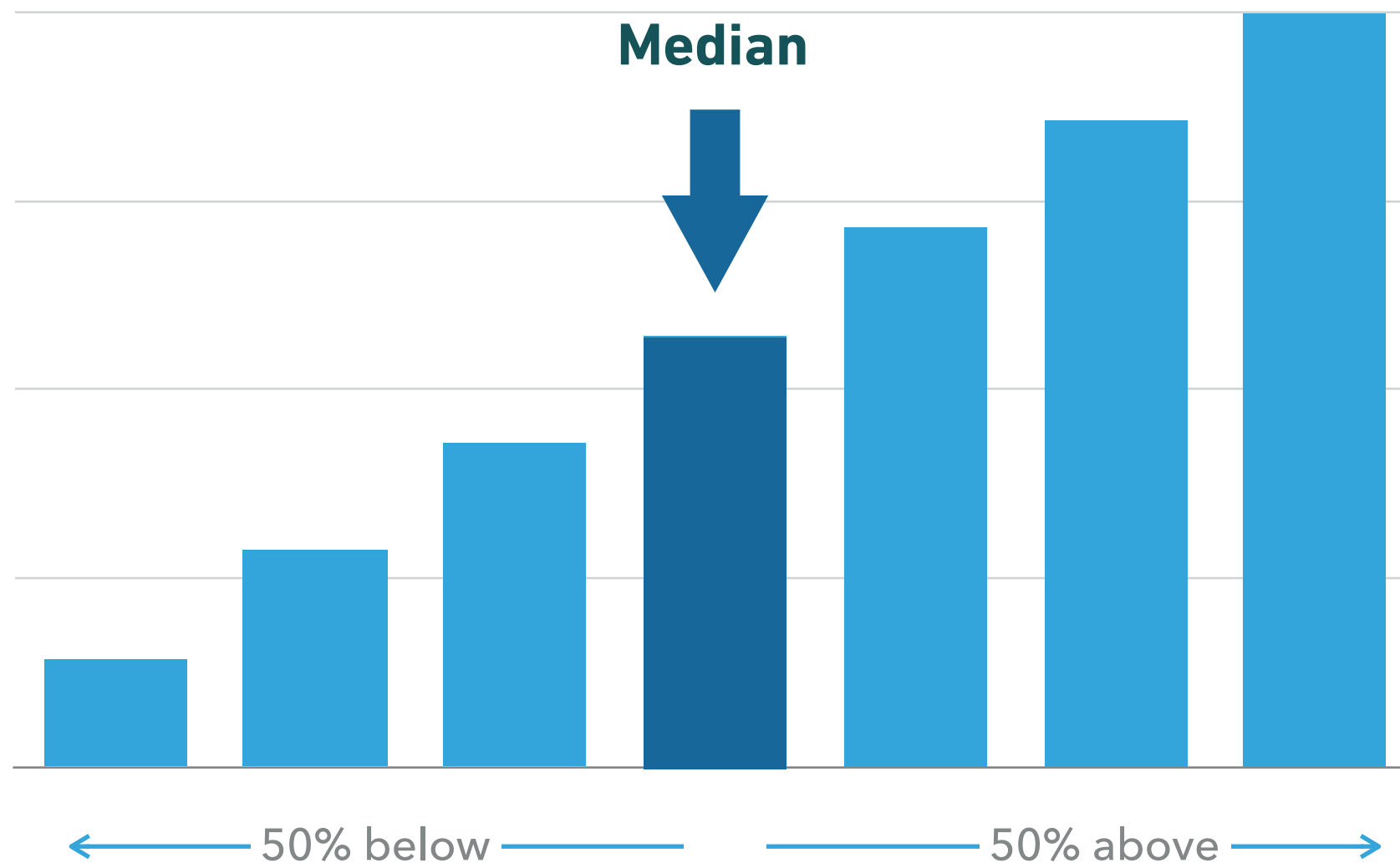
[Subscribe](#)

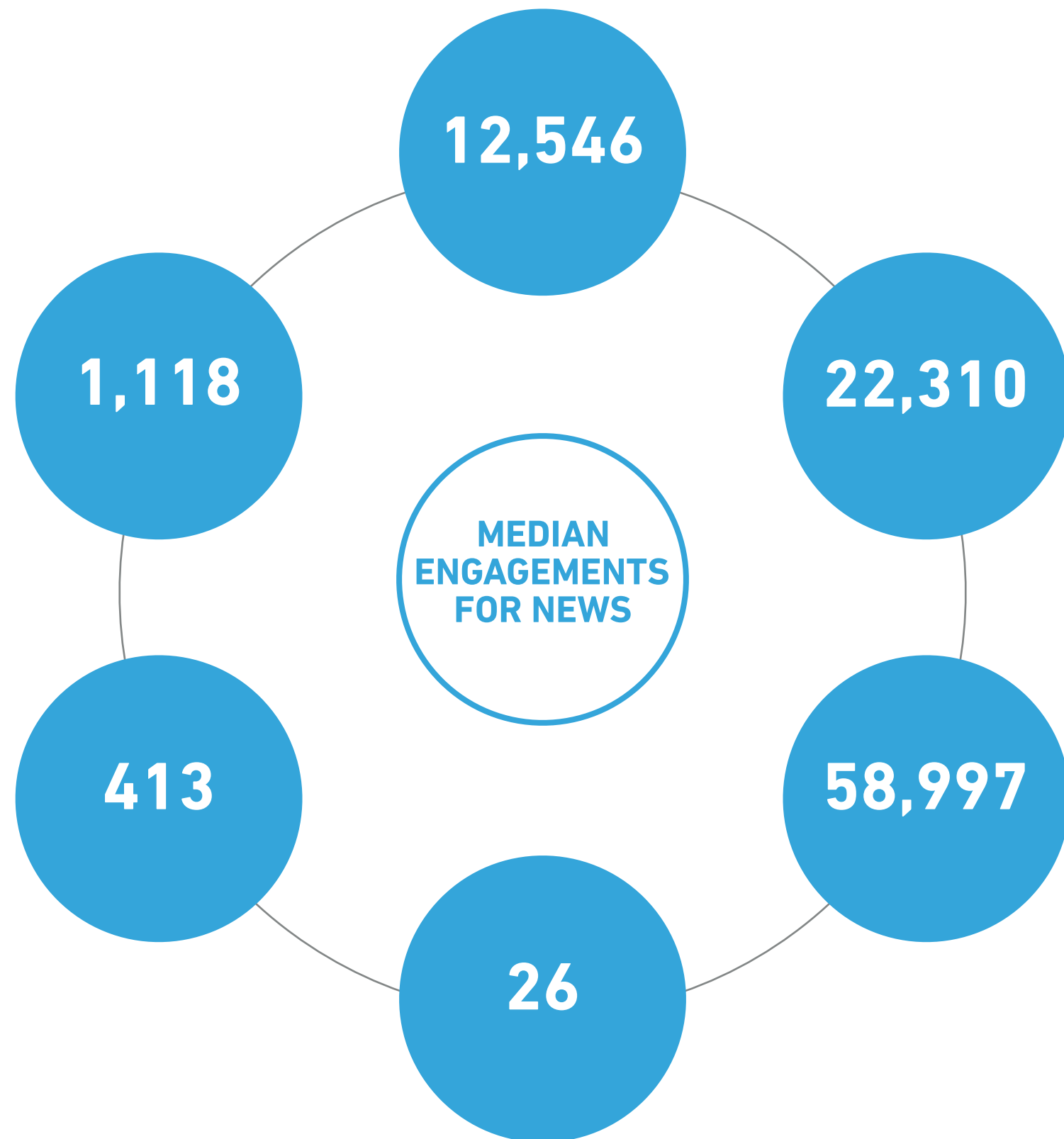
- ▶ 1.5M articles scanned, about 6K per day
- ▶ 230K subject profiles built by extracting entities
- ▶ Track homepage and other promotion activities
- ▶ 30+ publishers: large and small, left/right, US and UK (adding more languages now)
- ▶ 2B engagements collected

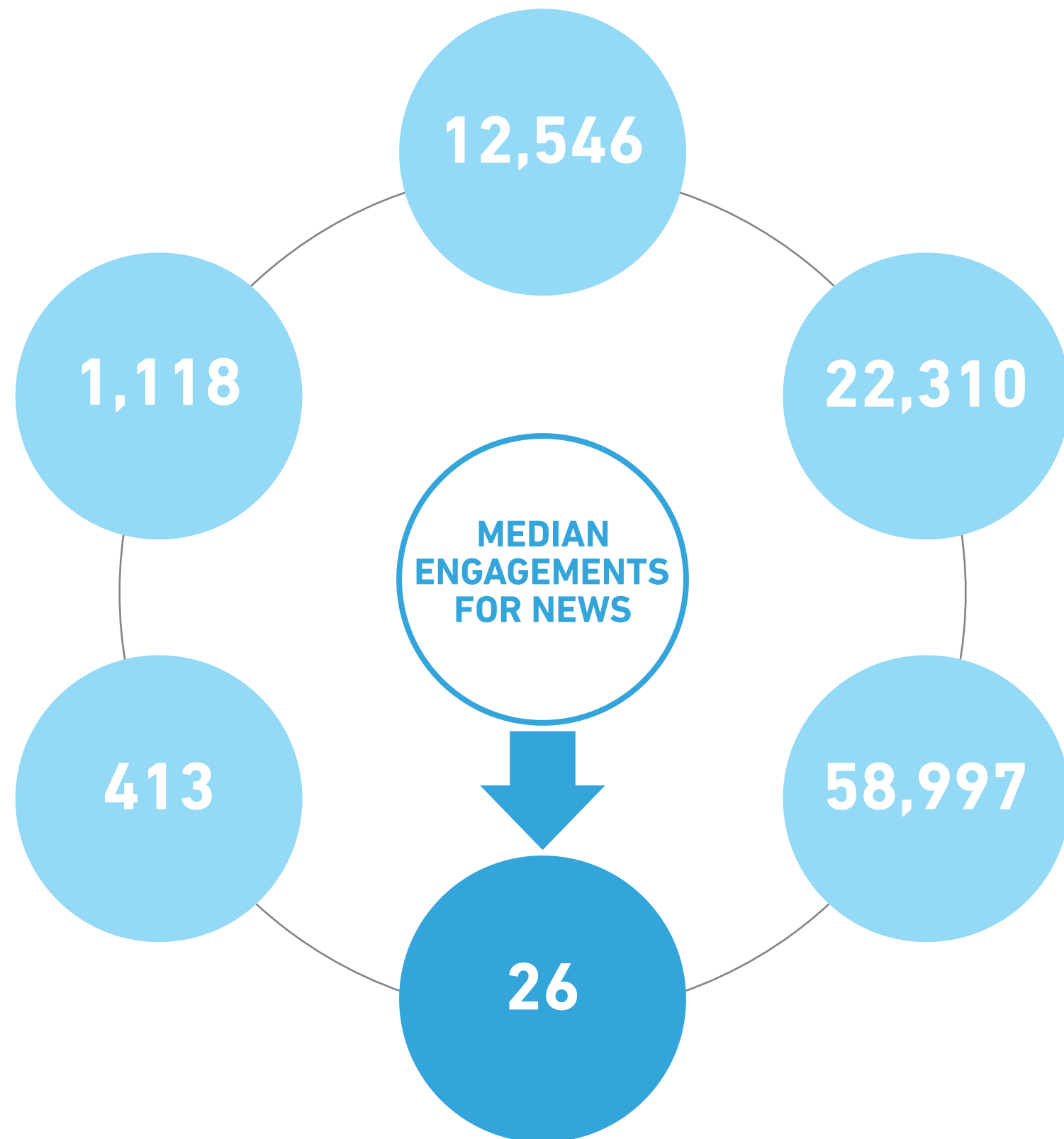


**News orgs need  
to play a game  
they can win**

# WHAT DOES 'GOOD' LOOK LIKE?



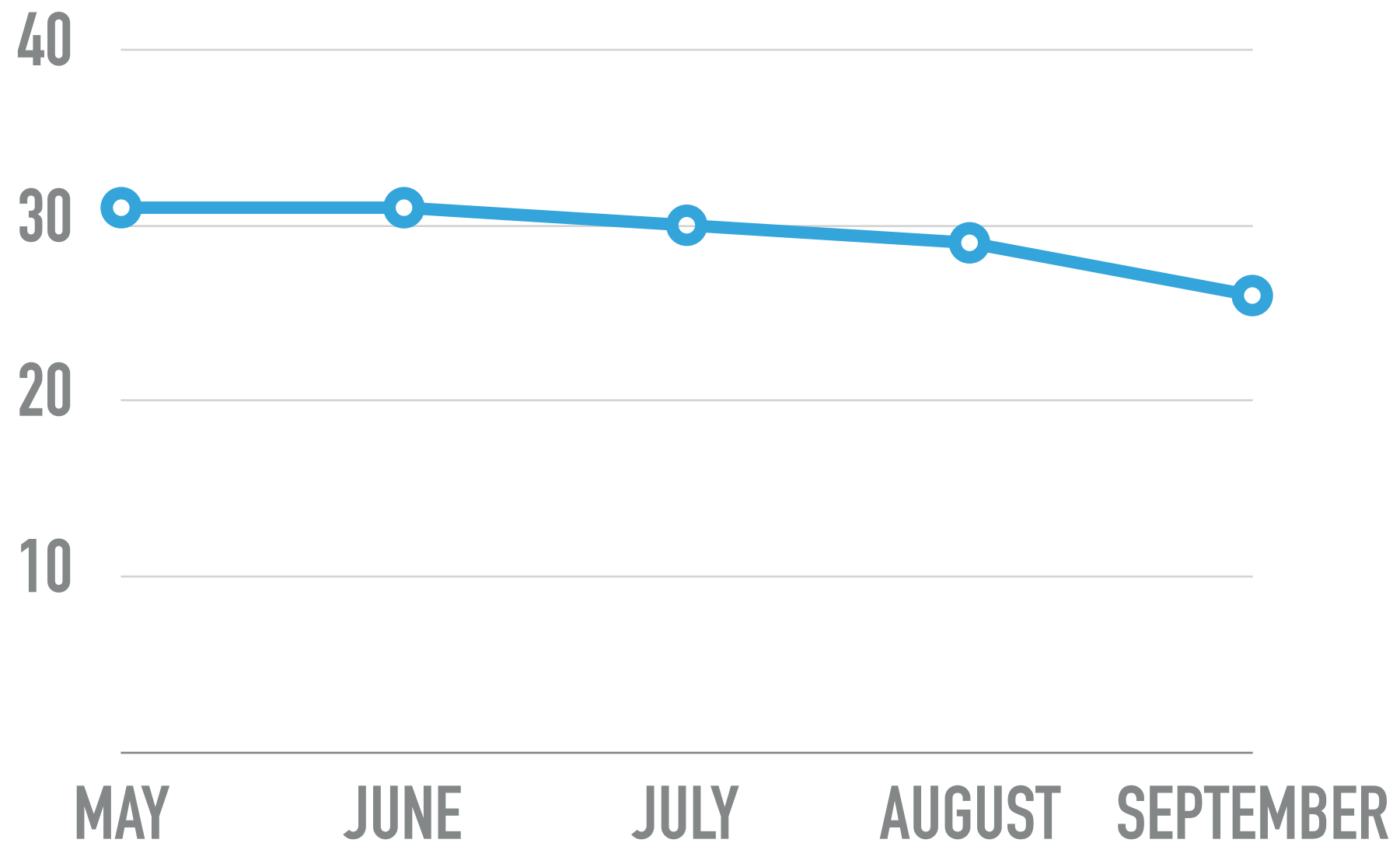






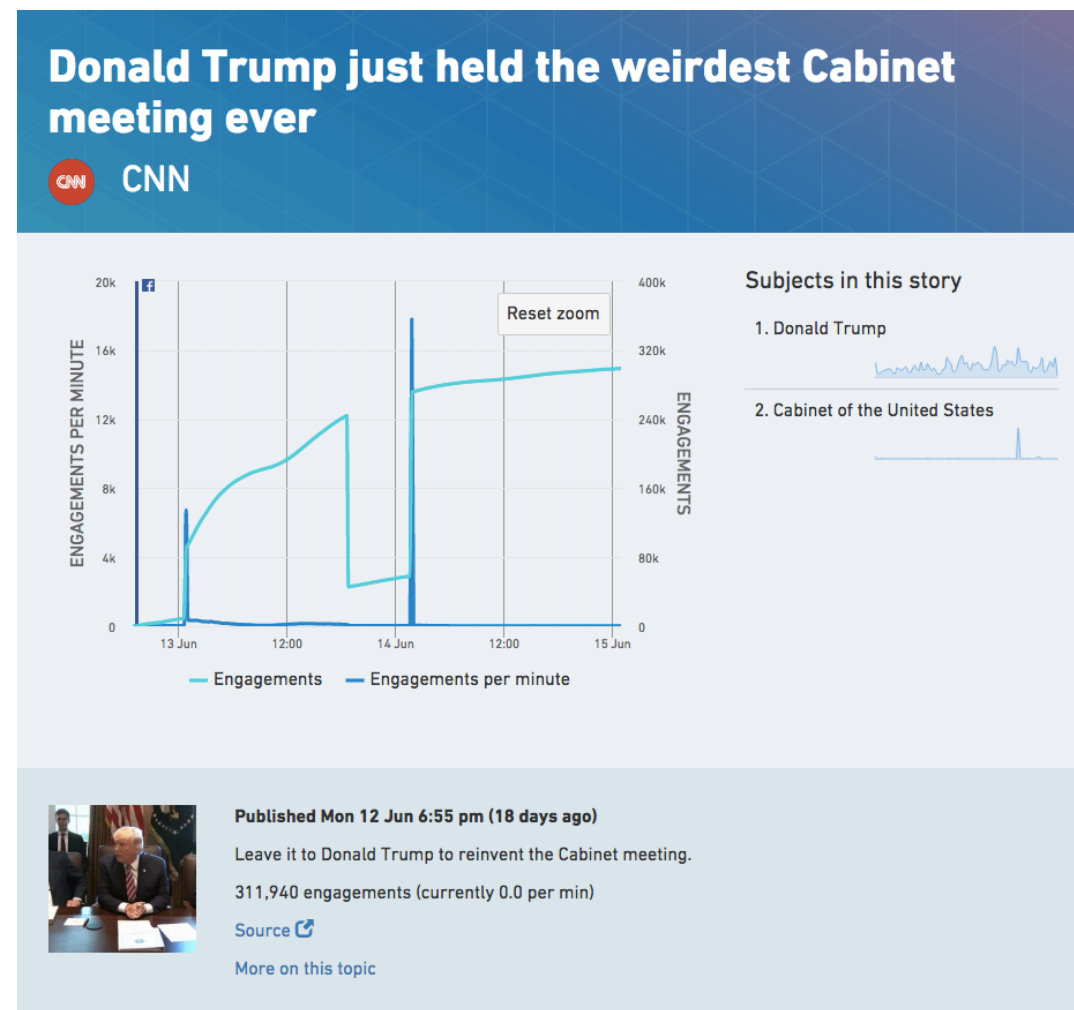
# FACEBOOK ENGAGEMENTS ARE DECLINING

MEDIAN ENGAGEMENTS FOR NEWS ARTICLES, 2017



# WHAT IS AN 'ENGAGEMENT'?

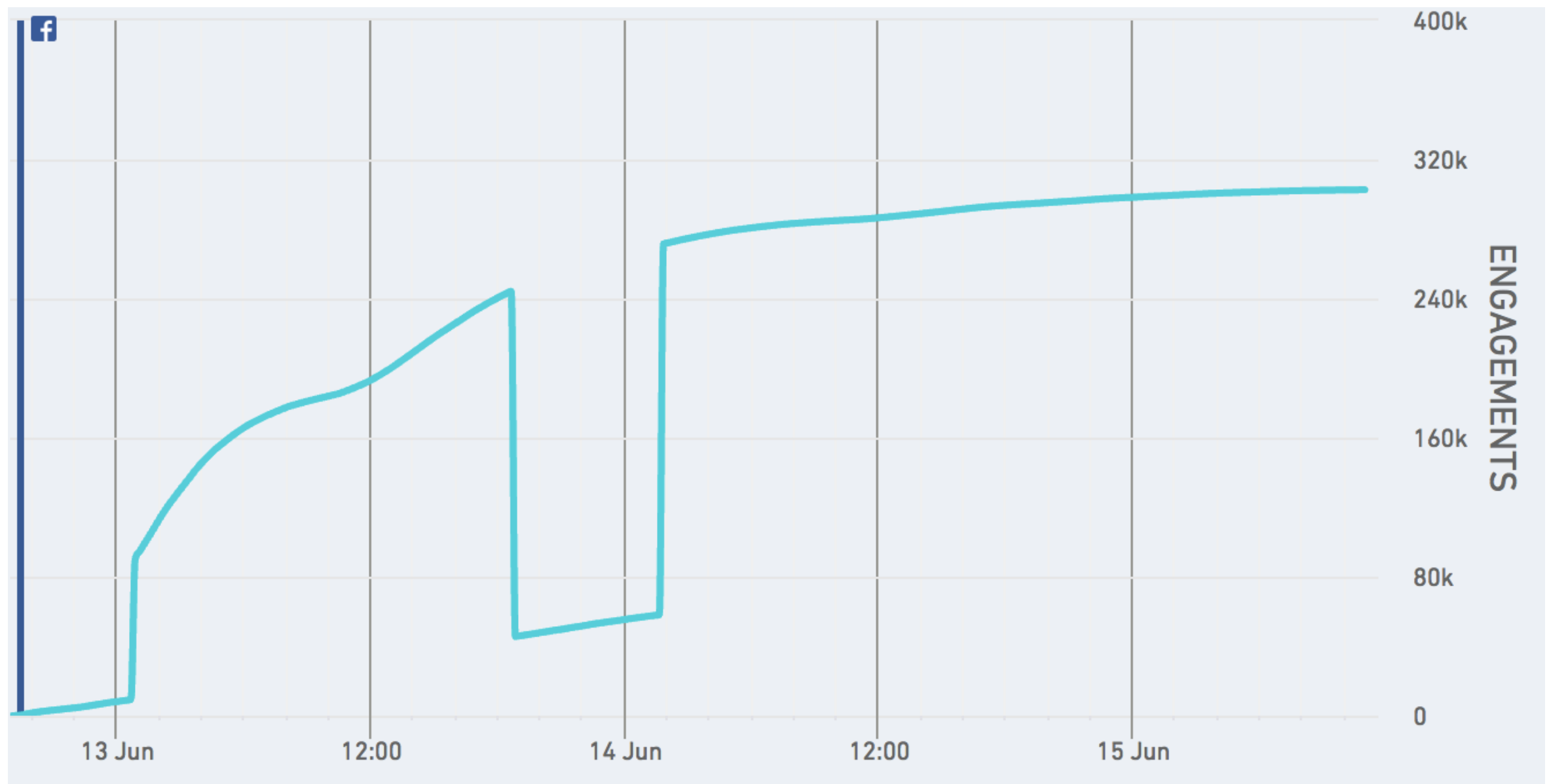
Engagements = Reactions + Shares + Comments



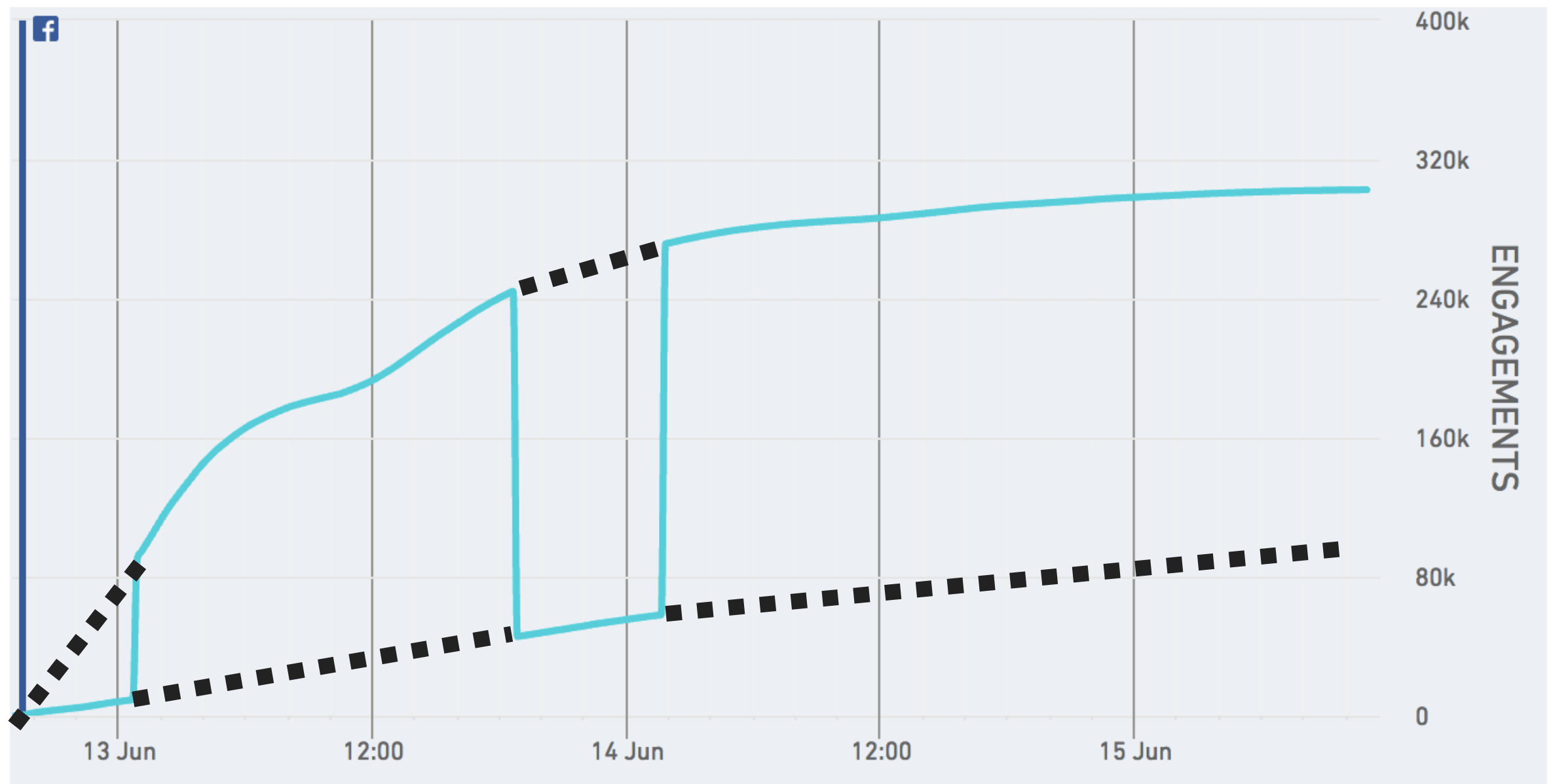
Facebook PR: “*High traffic publishers will see an increase in their engagement metrics.*”

*This fix applies to new URLs and will not change metrics from before June 9, 2017.”*

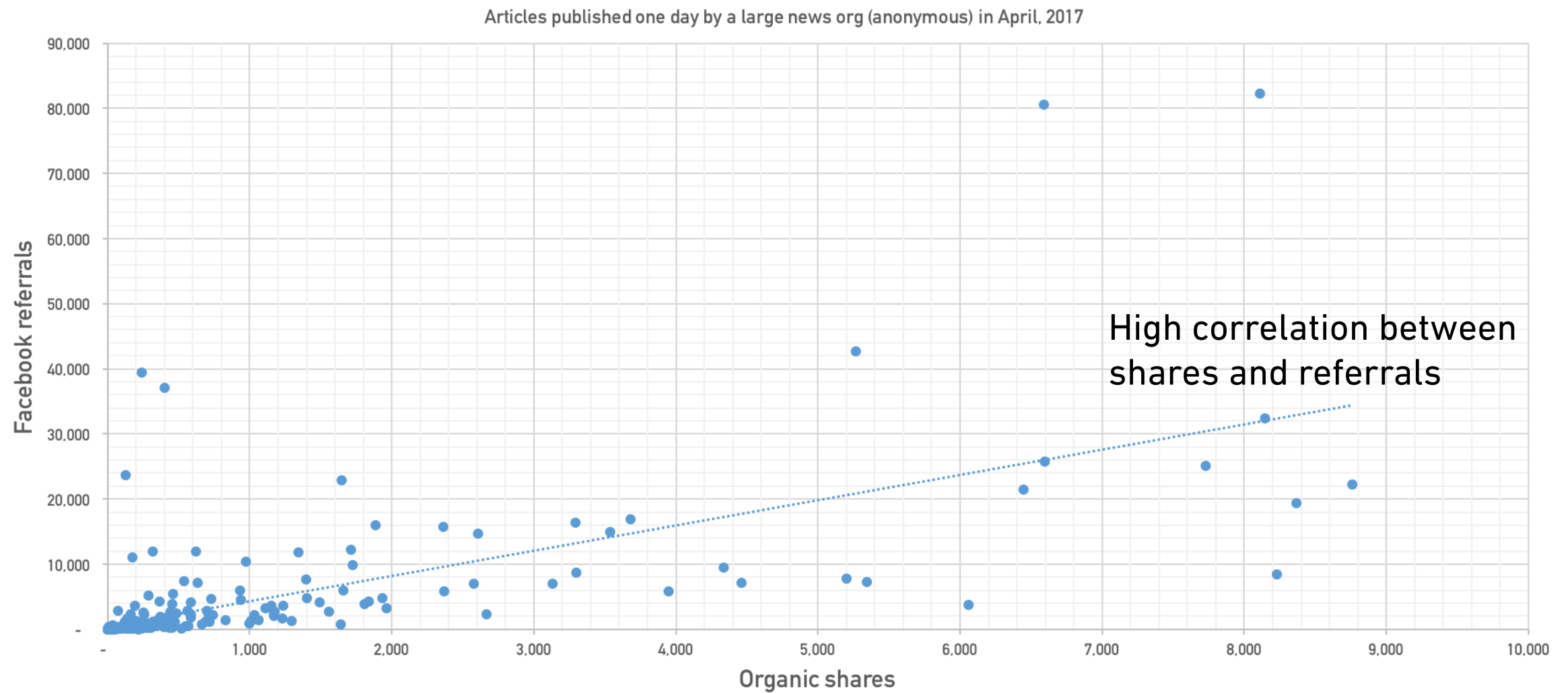
# SOMETIMES FACEBOOK'S DATA IS WRONG



# SOMETIMES FACEBOOK'S DATA IS WRONG



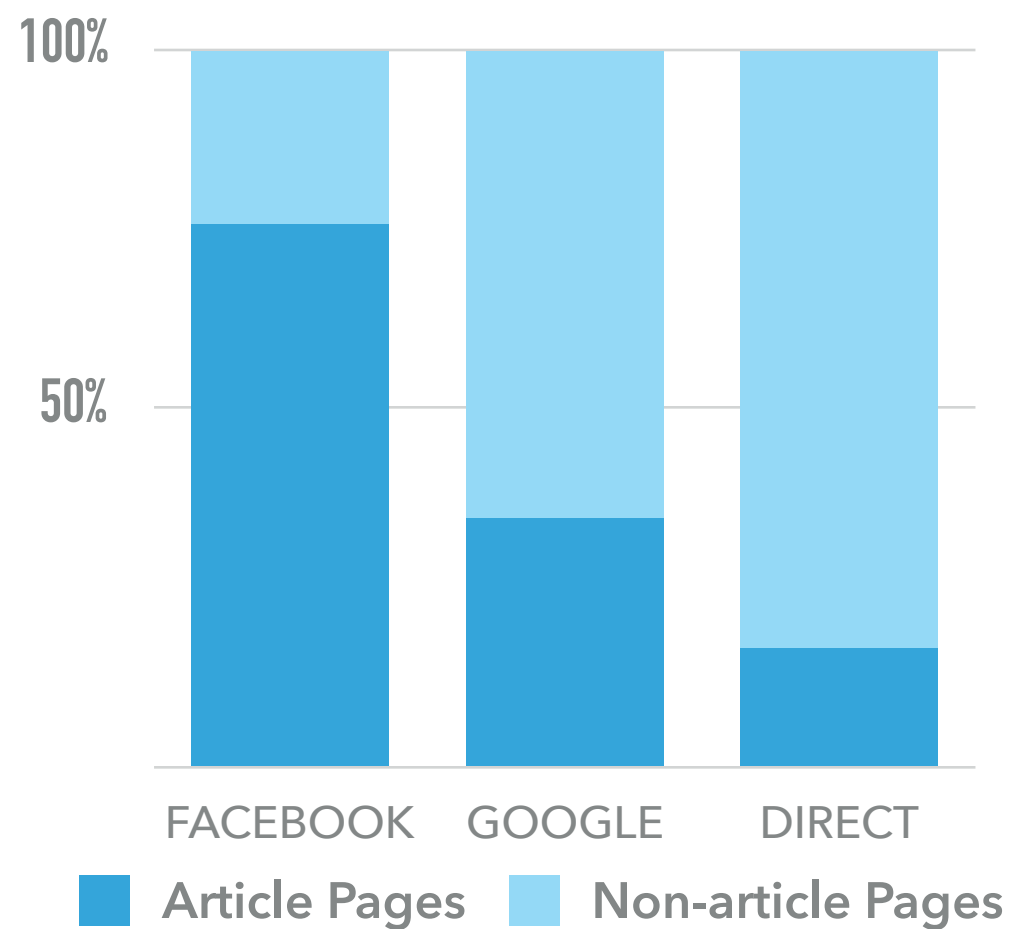
# DO ENGAGEMENTS DRIVE REFERRAL TRAFFIC?



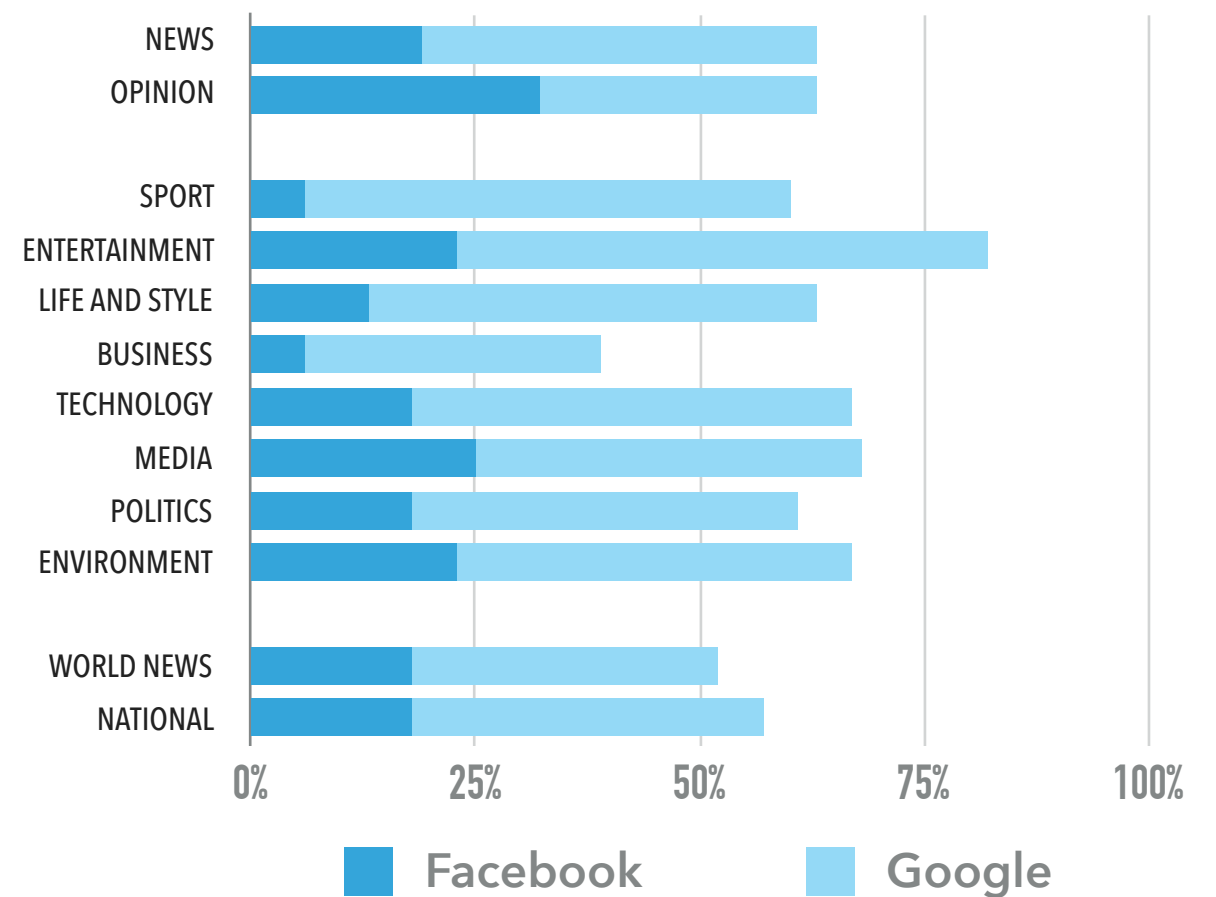
# Q: WHAT WILL BE AFFECTED MOST?

## A: ARTICLE PAGE VIEWS, SOFTER SUBJECTS

% of traffic to articles vs other pages



% of referral page views by content type

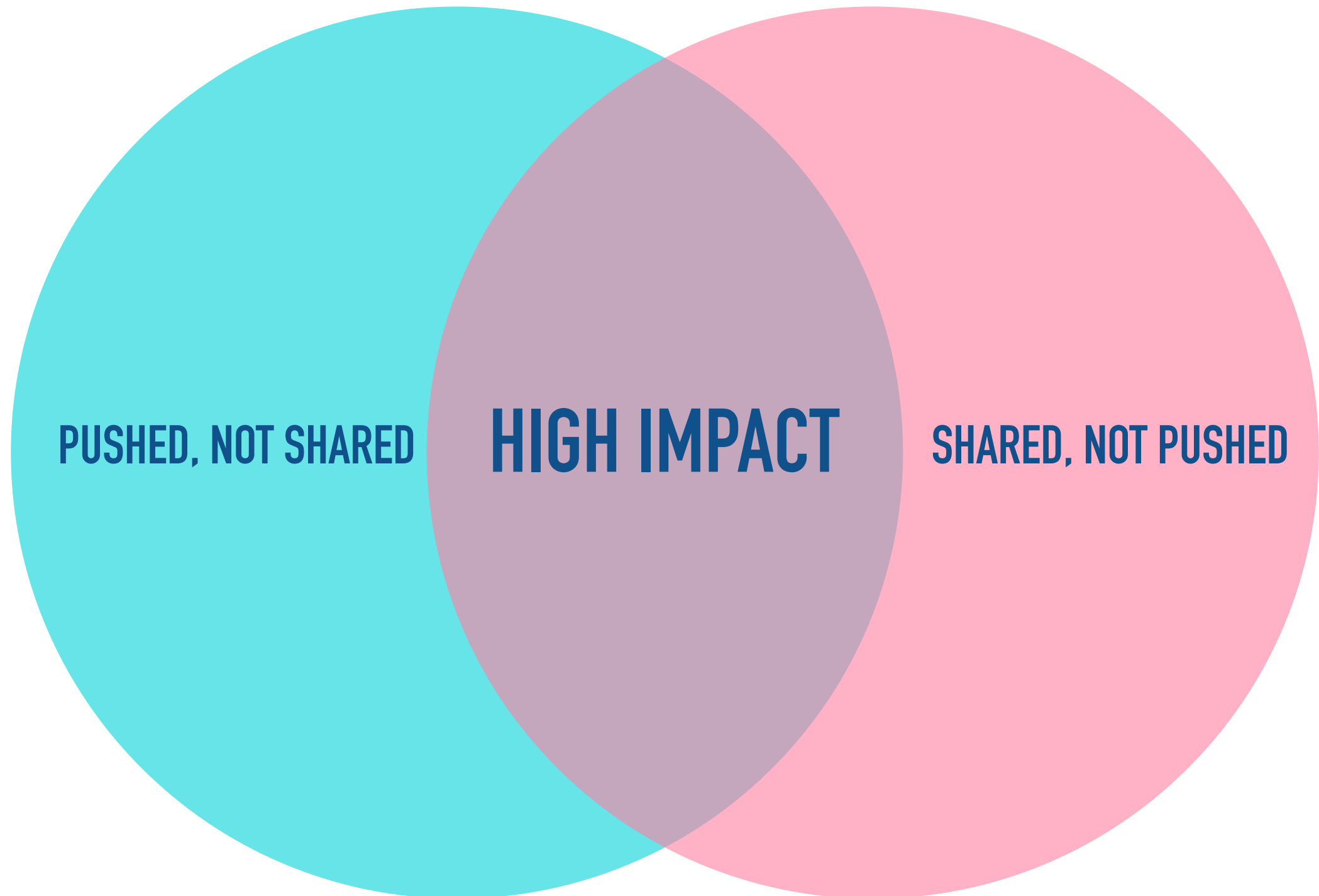




# Between order and chaos is Coopetition

**EDITORIAL  
EMPHASIS**

**SOCIAL  
RESPONSE**



# AN OPEN STANDARD FOR MEASURING ATTENTION

$$attentionIndex_a = leadScore_a + frontScore_a + facebookPromotionScore_a + responseScore_a$$

$$leadScore_a = 20 \cdot \left( \frac{\min(minsAsLead_a, 60)}{alexRank_a} \right) \cdot \left( \frac{\min(alexRank)}{60} \right)$$


$$frontScore_a = 15 \cdot \left( \frac{\min(minsOnFront_a, 1440)}{alexRank_a \cdot numArticlesOnFront_a} \right) \cdot \left( \frac{\min(alexRank \cdot numArticlesOnFront)}{1440} \right)$$

$$facebookPromotion_a = \begin{cases} 0 & \text{if not shared on brand page} \\ 15 \cdot \frac{\log(brandPageLikes_a) - \log(\min(brandPageLikes))}{\log(\max(brandPageLikes)) - \log(\min(brandPageLikes))} & \text{otherwise} \end{cases}$$

$$responseScore_a = \begin{cases} 0 & \text{if } engagements_a = 0 \\ 50 \cdot \frac{\log(\min(engagements_a, limit) + median(engagements)) - \log(1 + median(engagements))}{\log(limit + median(engagements)) - \log(1 + median(engagements))} & \text{if } engagements_a > 0 \end{cases}$$



# DATA PUBLISHED WITH AND OPEN LICENSE


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kaleida / attention-index

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Branch: master ▼attention-index / data /Create new fileUpload filesFind fileHistory

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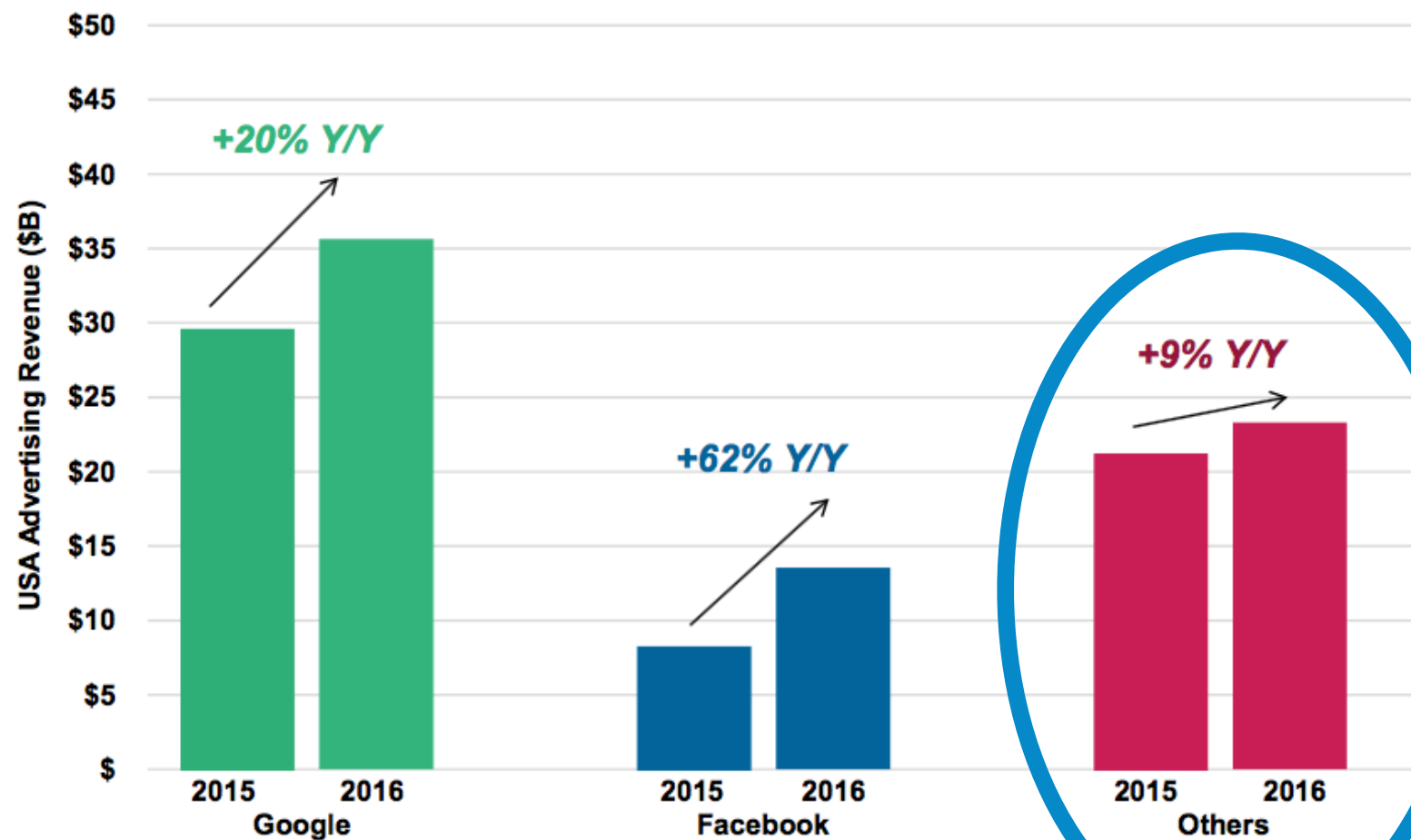
 Data and analysis for septemberLatest commit 4f5064a 11 days ago

..

CHANGELOG.md	Add in changelog	4 months ago
articles_2017-05-01_2017-05-31.csv	Batch of data for May	5 months ago
articles_2017-06-01_2017-06-30.csv	Data for June	4 months ago
articles_2017-07-01_2017-07-31.csv	July Data	3 months ago
articles_2017-08-01_2017-08-31.csv	Data and analysis for august	2 months ago
articles_2017-09-01_2017-09-30.csv	Data and analysis for september	11 days ago
articles_with_provisional_scores_2017-05-01_2017-0...	Simplify the equations further	4 months ago
articles_with_provisional_scores_2017-06-01_2017-0...	Data for June	4 months ago
articles_with_provisional_scores_2017-07-01_2017-0...	July Data	3 months ago
articles_with_provisional_scores_2017-08-01_2017-0...	Data and analysis for august	2 months ago
articles_with_provisional_scores_2017-09-01_2017-0...	Data and analysis for september	11 days ago
attention-index-august.ipynb	Data and analysis for august	2 months ago
attention-index-july.ipynb	July Data	3 months ago
attention-index-june.ipynb	Data for June	4 months ago
attention-index-september.ipynb	Data and analysis for september	11 days ago

## Google + Facebook = 85% (& Rising) Share of Internet Advertising Growth, USA

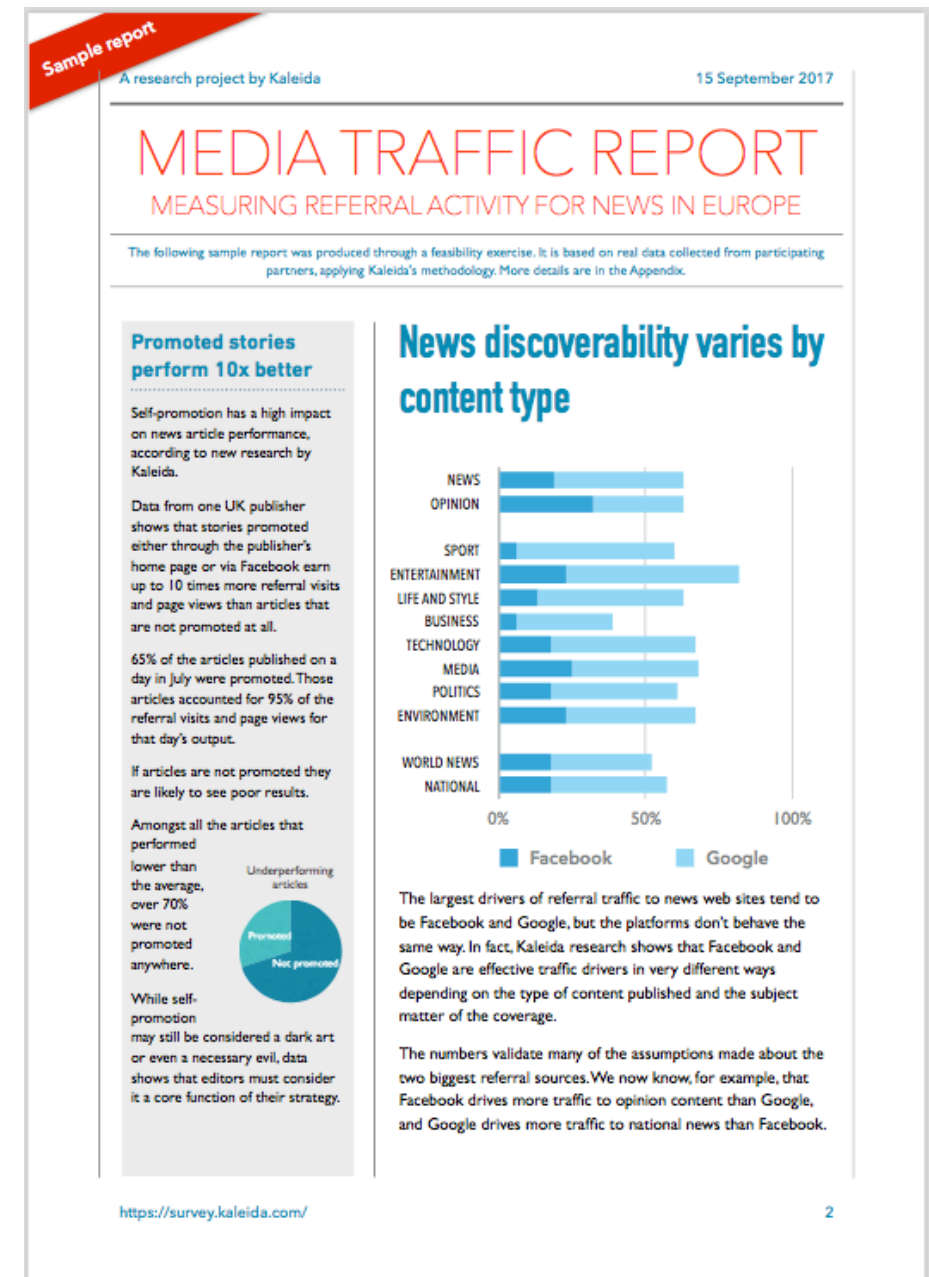
Advertising Revenue (\$B) and Growth Rates (%) of  
Google vs. Facebook vs. Other, USA, 2015 – 2016



This number  
should go up  
faster

# JOIN OUR NEXT RESEARCH PROJECT

- ▶ Studying referral traffic patterns
- ▶ All news media in Europe invited
- ▶ Get early access to the data
- ▶ Get benchmarking tools to compare your traffic with other news orgs
- ▶ It takes 60 seconds to join – login with Google Analytics
- ▶ *Participants will be **anonymous**. Results reported in aggregate only*







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