

# The Global State of Reader Engagement



Discovery & Engagement in a Mobile-first World

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# Discovery & Engagement in a Mobile-first World

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ABOUT US

We enable meaningful  
stories to thrive —  
wherever they live

700 enterprise publishers

80% of the top US pubs

65 Countries

6 Continents



The Washington Post

CNN

Clarín

*The Atlantic*

Le Monde

 **UOL**

The New York Times

## THE MOBILE REVOLUTION

### Critical moment:

In news and media, mobile has now firmly surpassed desktop

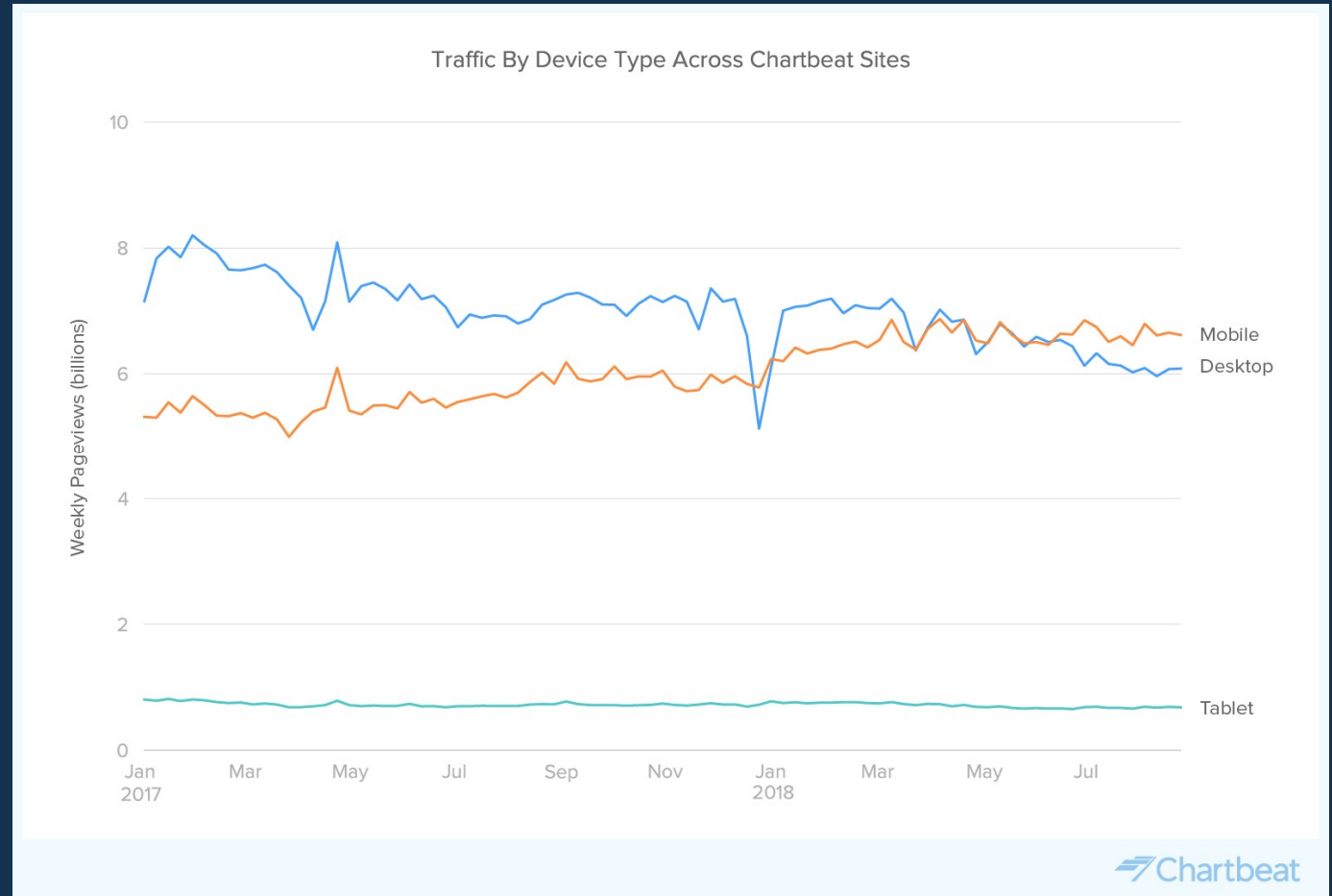
2017 – 2018

### Desktop

Double-digit declines

### Mobile

Double-digit growth



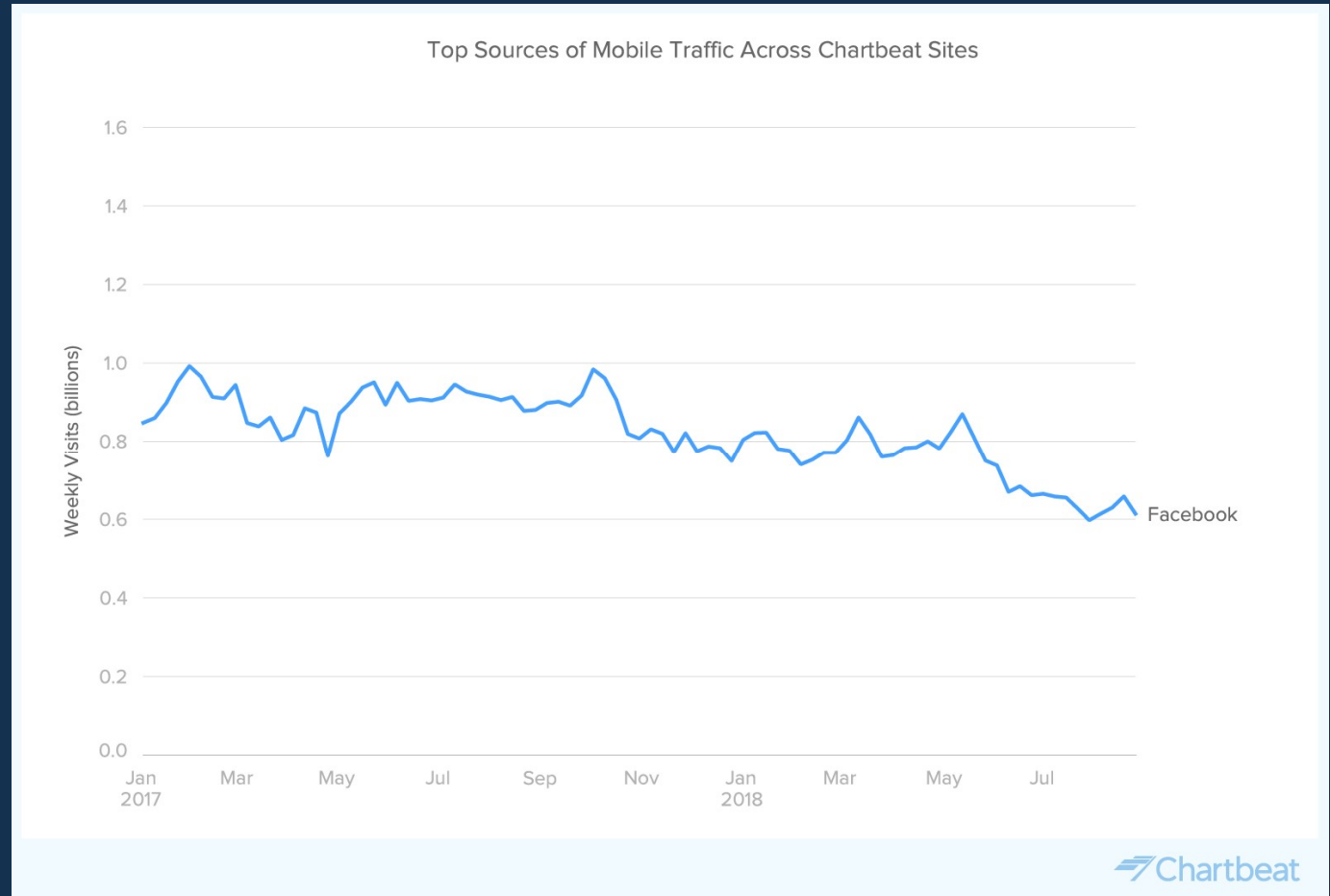
# We'll investigate two key areas in a mobile-first world

- Referral sources and discovery
- Engagement on page and over time

# A reversal in the largest sources of traffic

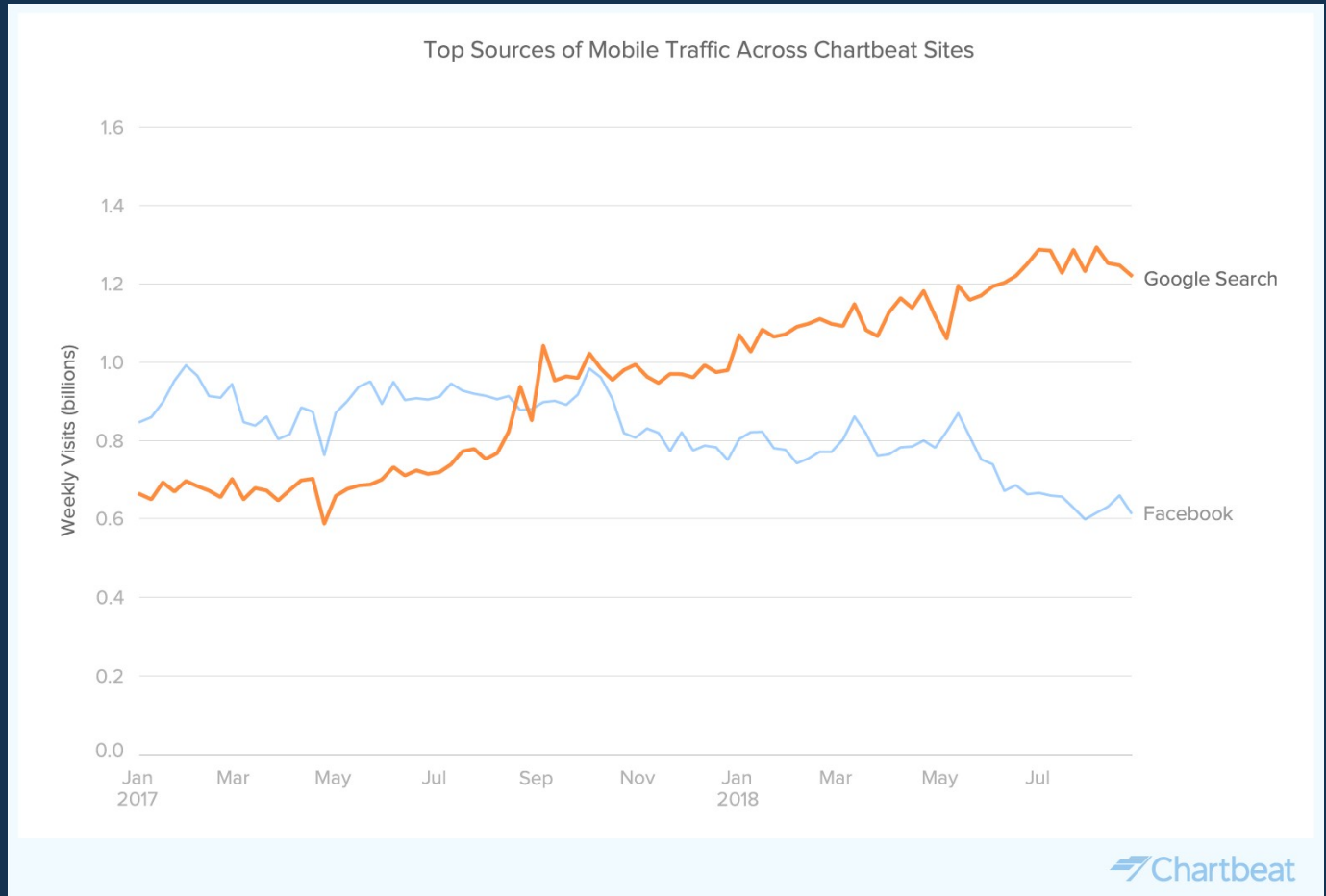
## REFERRERS

Facebook traffic has steadily declined and is now **down nearly 40%** versus January 2017



## REFERRERS

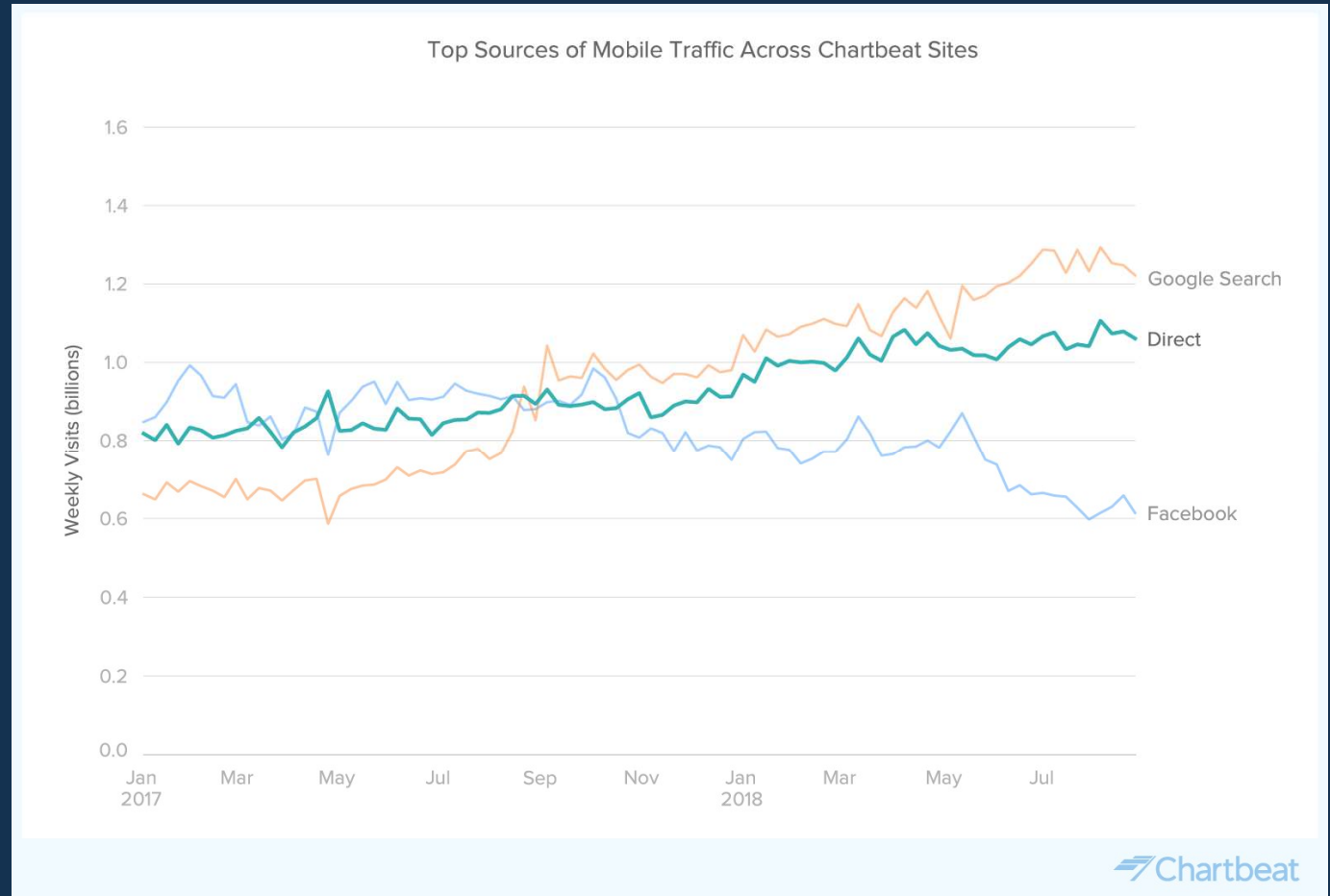
Google Search on mobile has grown **more than 2x** since January 2017





## REFERRERS

Direct mobile traffic  
has steadily grown by  
**more than 30%**



# What might a declining Facebook mean for publishers?

## REFERRERS

August 3, 2018:  
Facebook down for  
45 minutes

What happened to  
news  
consumption?



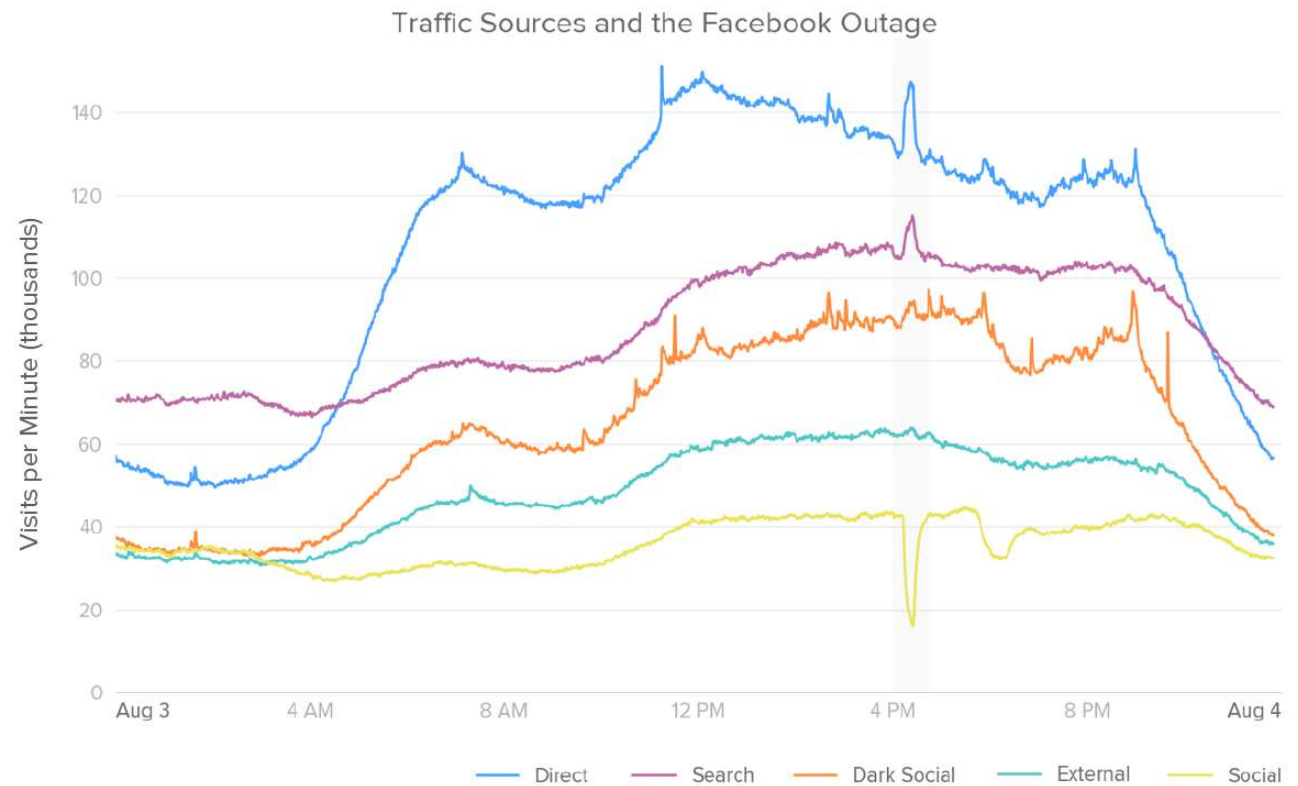
## REFERRERS

Users switched to Direct and Search as discovery mechanisms

Overall traffic up **2.3%**

Direct up **11%**, driven by app increase of **22%**

Search up **8%**

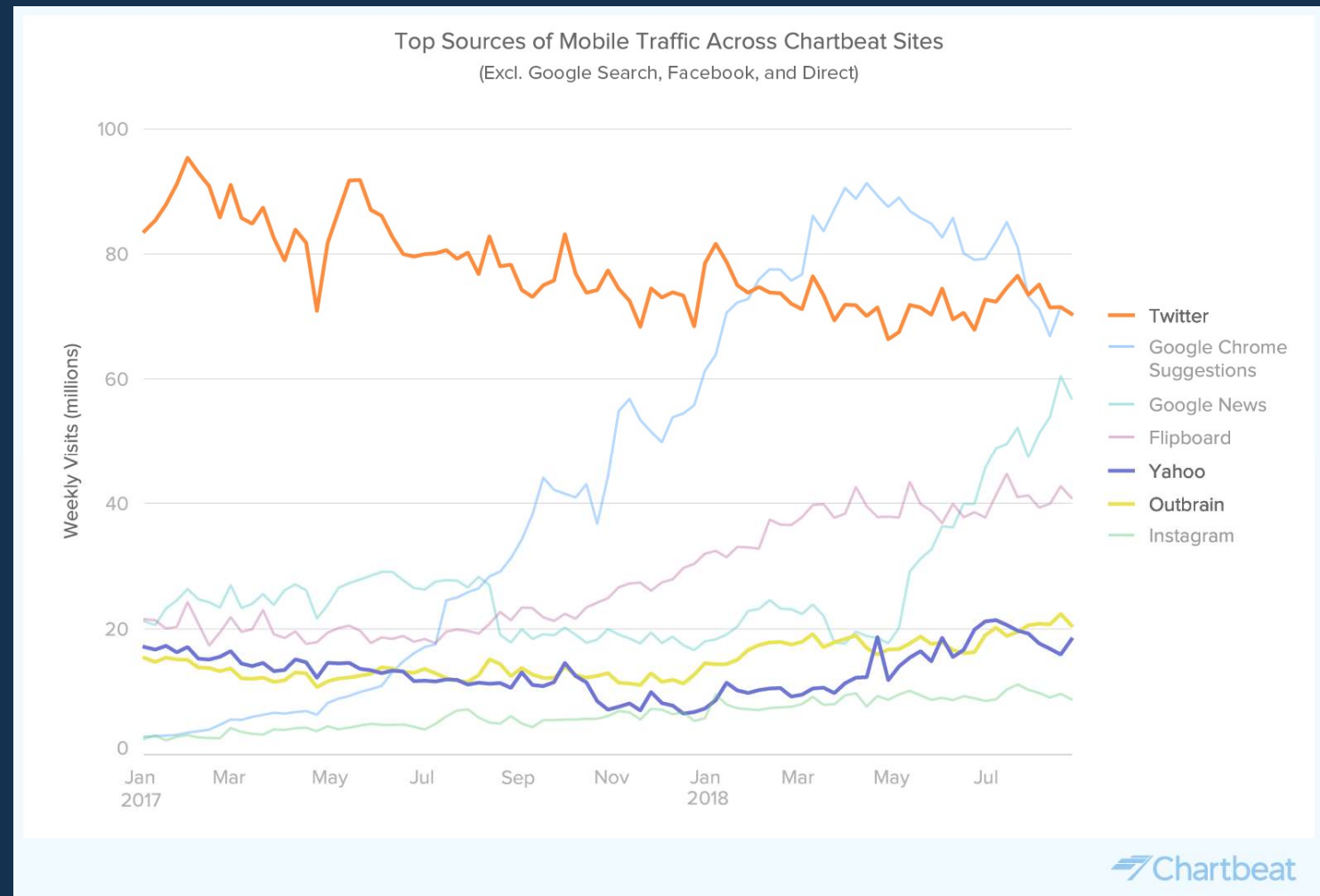


# Shifts outside of the big three traffic sources



## REFERRERS

Top traditional  
referrers —  
**Twitter, Yahoo,  
Outbrain** — were  
roughly constant  
throughout the last  
20 months

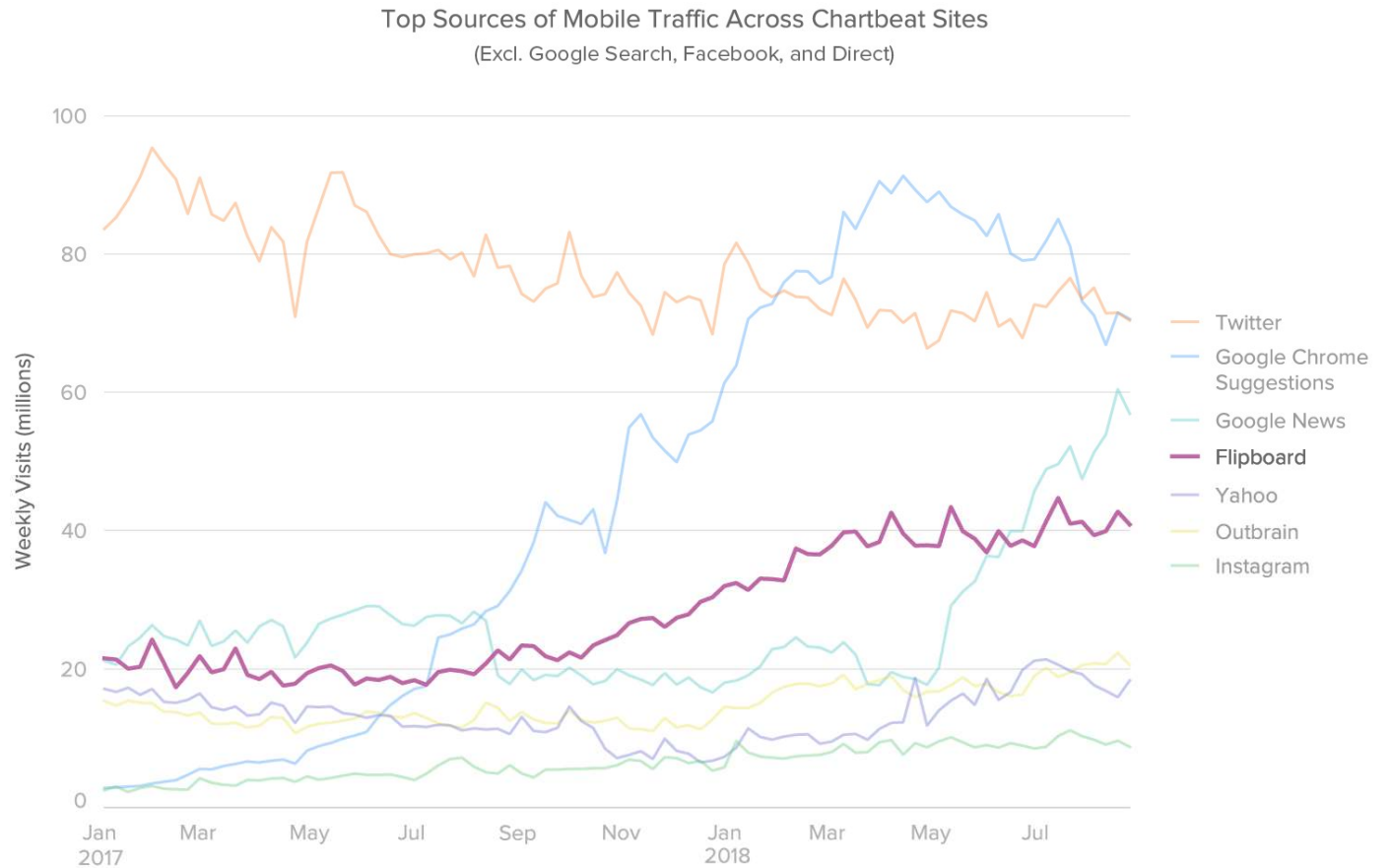


## REFERRERS

### Flipboard

Up **2x** in the last year

Now a larger mobile referrer than Yahoo and Outbrain

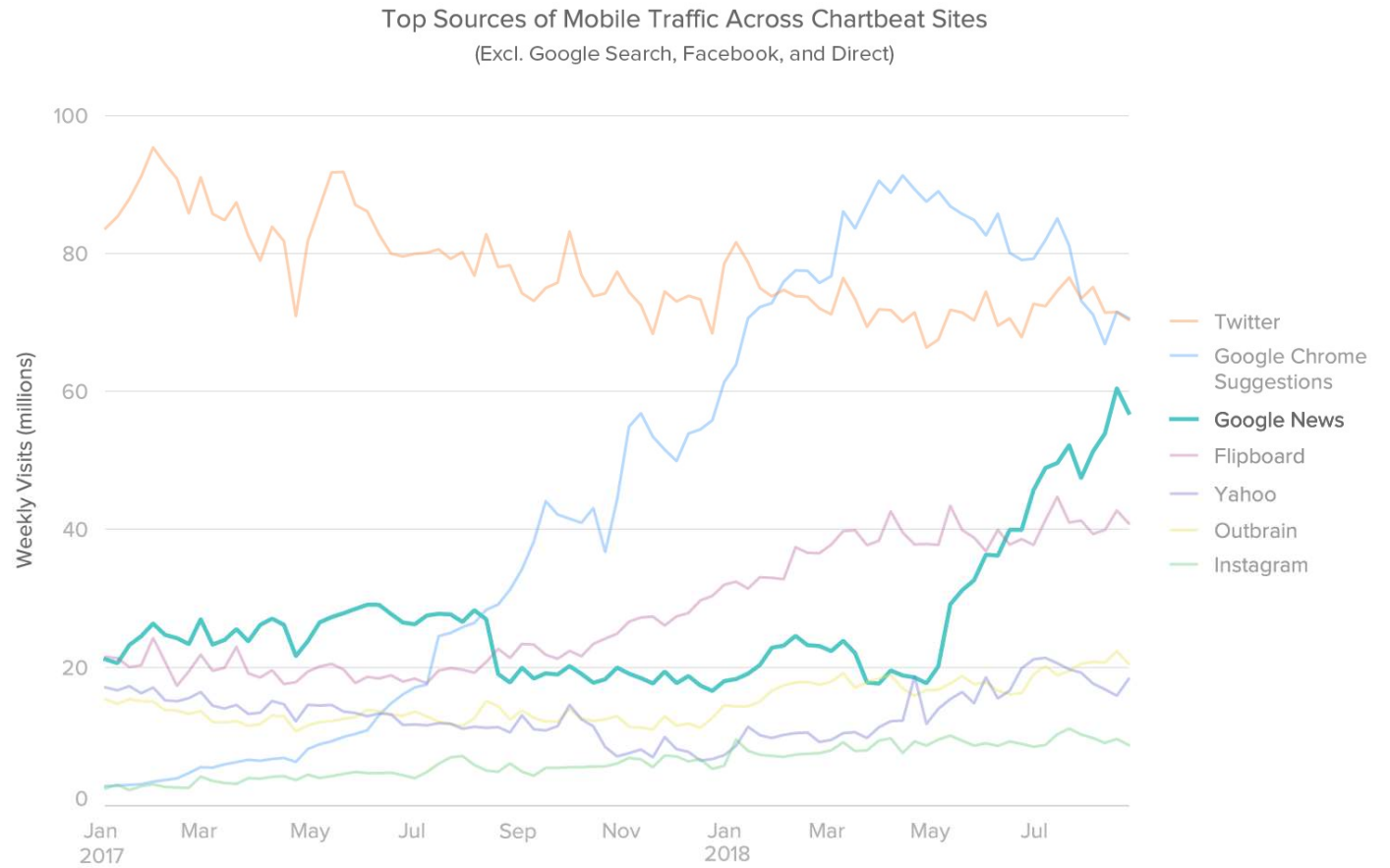


## REFERRERS

### Google News

Replaced  
Google Play  
Newsstand in  
May

Has grown  
substantially  
since it  
relaunched



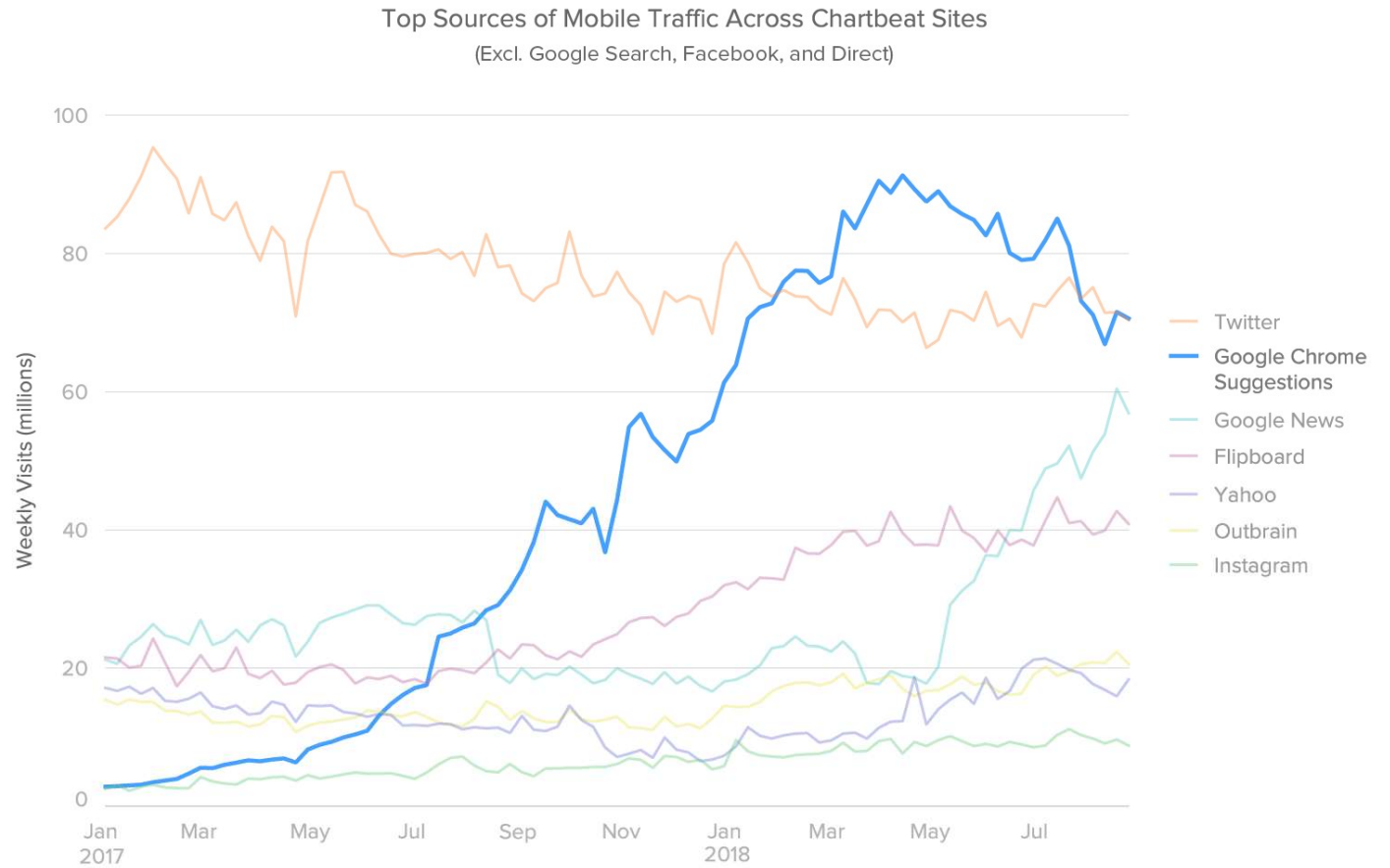


## REFERRERS

### Google Chrome Suggestions

Has grown 20x in the past year

Now as large a traffic source as Twitter



## REFERRERS

1. Are we in a post-social world when it comes to referred traffic? What will come next?
2. The Google ecosystem is by far the dominant traffic source on mobile
3. Direct on mobile is important, and growing
4. Up and coming: mobile “portals”



# Engagement differences between devices

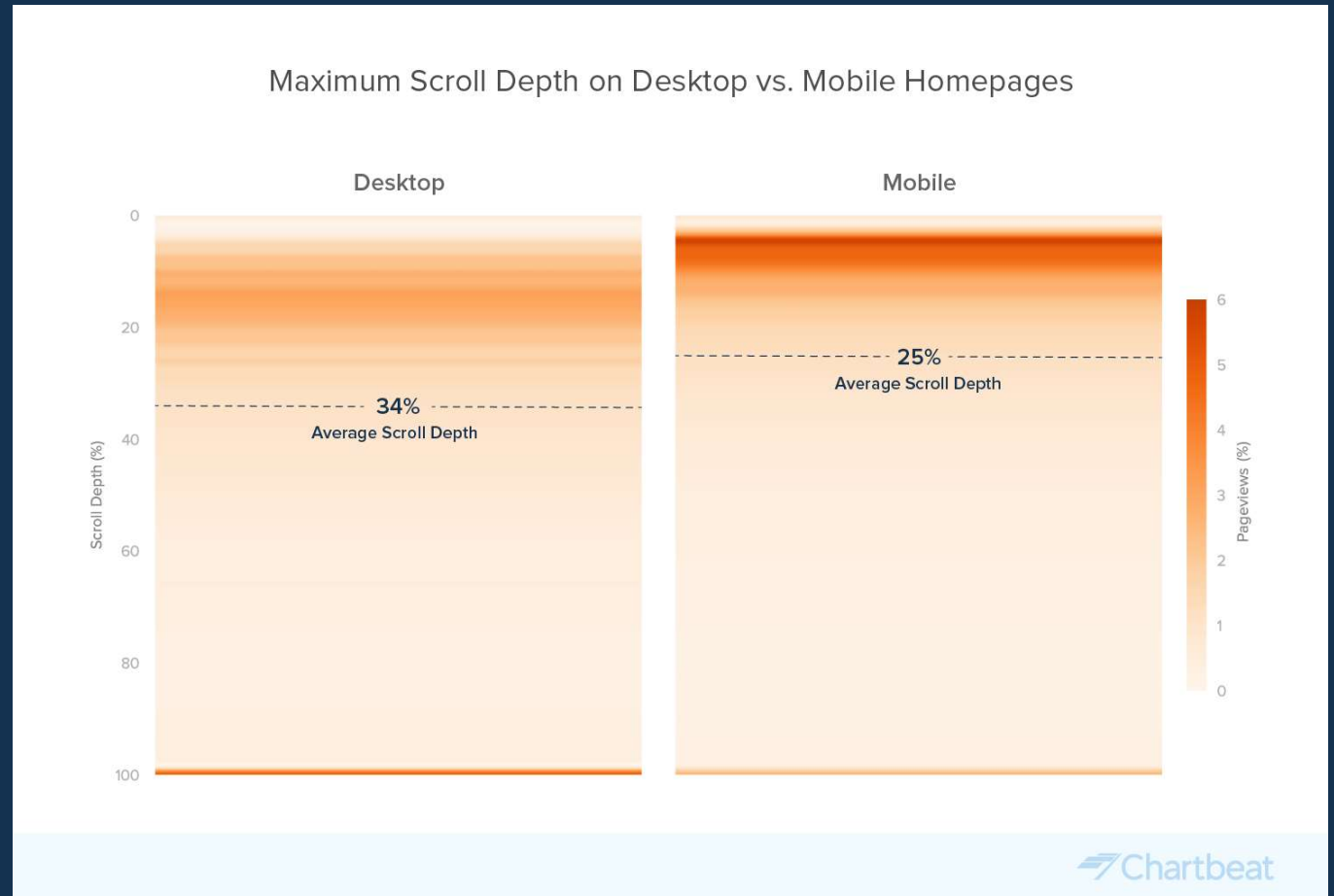


## Three metrics for homepage engagement:

- scroll
- engaged time
- click-through rate

## ENGAGEMENT

Mobile homepage visitors scroll to view **25%** of the page, compared to **34%** for desktop



## ENGAGEMENT

... but, they engage for **40%** longer and are **20%** more likely to click

	Desktop	Mobile
Average Engaged Time	16s	22s
Average CTR	56%	67%



## ENGAGEMENT

A collaboration with Nir Grinberg of Northeastern University looked at types of reading behavior and identified six types of readers



Paper: <https://bit.ly/2wUwu59>

# Identifying Modes of User Engagement with Online News and Their Relationship to Information Gain in Text

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## ABSTRACT

Prior work established the benefits of server-recorded user engagement measures (e.g. clickthrough rates) for improving the results of search engines and recommendation systems. Client-side measures of post-click behavior received relatively little attention despite the fact that publishers have now the ability to measure how millions of people interact with their content at a fine resolution using client-side logging.

In this study, we examine patterns of user engagement in a large, client-side log dataset of over 7.7 million page views (including both mobile and non-mobile devices) of 66,821 news articles from seven popular news publishers. For each page view we use three summary statistics: dwell time, the furthest position the user reached on the page, and the amount of interaction with the page through any form of input (touch, mouse move, etc.). We show that simple transformations on these summary statistics reveal six prototypical modes of reading that range from scanning to extensive reading and persist across sites. Furthermore, we develop a novel measure of information gain in text to capture the development of ideas within the body of articles and investigate how information gain relates to the engagement with articles. Finally, we show that our new measure of information gain is particularly useful for predicting reading of news articles before publication, and that the measure captures unique information not available otherwise.

## CCS CONCEPTS

## 1 INTRODUCTION

Over the past two decades, our reading habits have turned from physical media (books, magazines and newspapers) to their digital counterparts (e-readers, websites, and apps). Pew research estimated last year that 38% of Americans often got their news online, almost twice the number of people who read it in print [31]. Where previously news publishers had to rely on gross sales numbers or small-scale surveys that took weeks or months to collect, they now have near real time information about individual readers engaging with news content on their website.

The shift to digital media creates new opportunities for publishers to better understand user engagement within an article page using client-side logging. Thus far, the dominant measure of post-click behavior has been dwell time, an estimate of the total time a user spent on the page. Dwell time is a useful measure for improving the results of search engines and recommendation systems [21, 42]. However, dwell time only provides partial information about the activity of a user on a page. Other client-side interactions such as cursor movement, scrolling, and highlighting provide additional information about the article relevance and the distribution of attention on a page [15, 23]. Although beneficial, these additional client-side measures incur substantial costs in terms of model complexity, network communication, and storage, thus making these measures difficult for news outlets to use in practice, especially at large scale.

Furthermore, there is a disconnect between measures of user engagement and the structure of news articles. Reading is a process

## **Bounce backs**

No engagement before quickly leaving the page

Idle

Shallow

Scanners

Readers

Long readers





## ENGAGEMENT

### Bounce backs

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**Idle**

High time on page, but very low engaged time

Shallow

Scanners

Readers

Long readers



## ENGAGEMENT

Bounce backs

Idle

---

**Shallow**

Minimal (but non-zero)  
engagement

Scanners

Readers

Long readers



## ENGAGEMENT

Bounce backs

Idle

Shallow

---

**Scanners**

Readers

Long readers

Deep scroll, but at speeds  
substantially faster than true  
reading



## ENGAGEMENT

Bounce backs

Idle

Shallow

Scanners

---

**Readers**

Deep scroll and engagement

Long readers



## ENGAGEMENT

Bounce backs

Idle

Shallow

Scanners

Readers

---

**Long readers**

Very deep scroll and engagement



Scaling this analysis across our network, we saw notable differences between mobile and desktop reading behavior

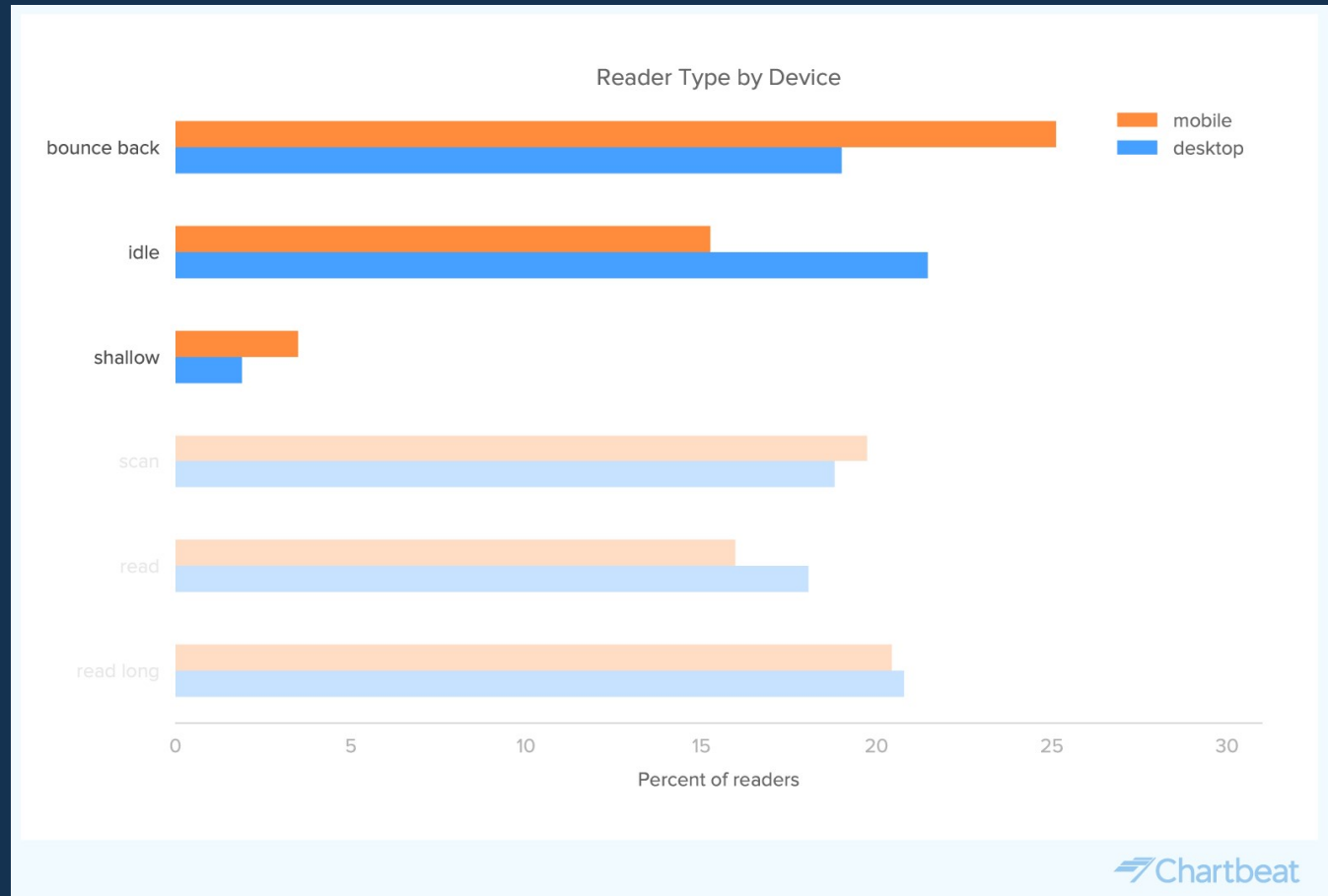


## ENGAGEMENT

**Low quality**  
engagement patterns  
are quite different  
between devices

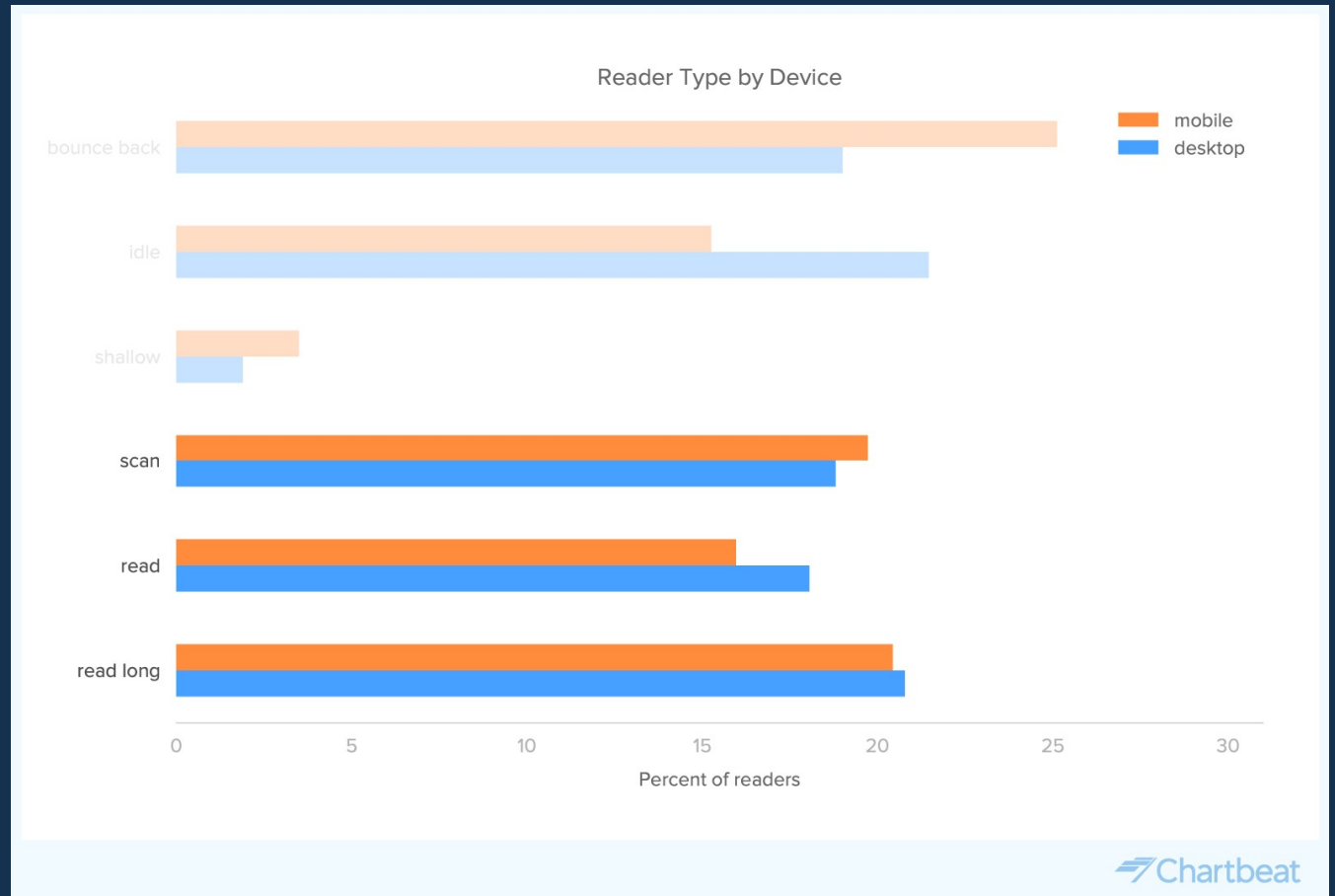
**Mobile visitors**  
More likely to  
bounce back or have  
shallow visits

**Desktop visitors**  
More likely to be idle



## ENGAGEMENT

**High quality** reading is quite similar between mobile and desktop





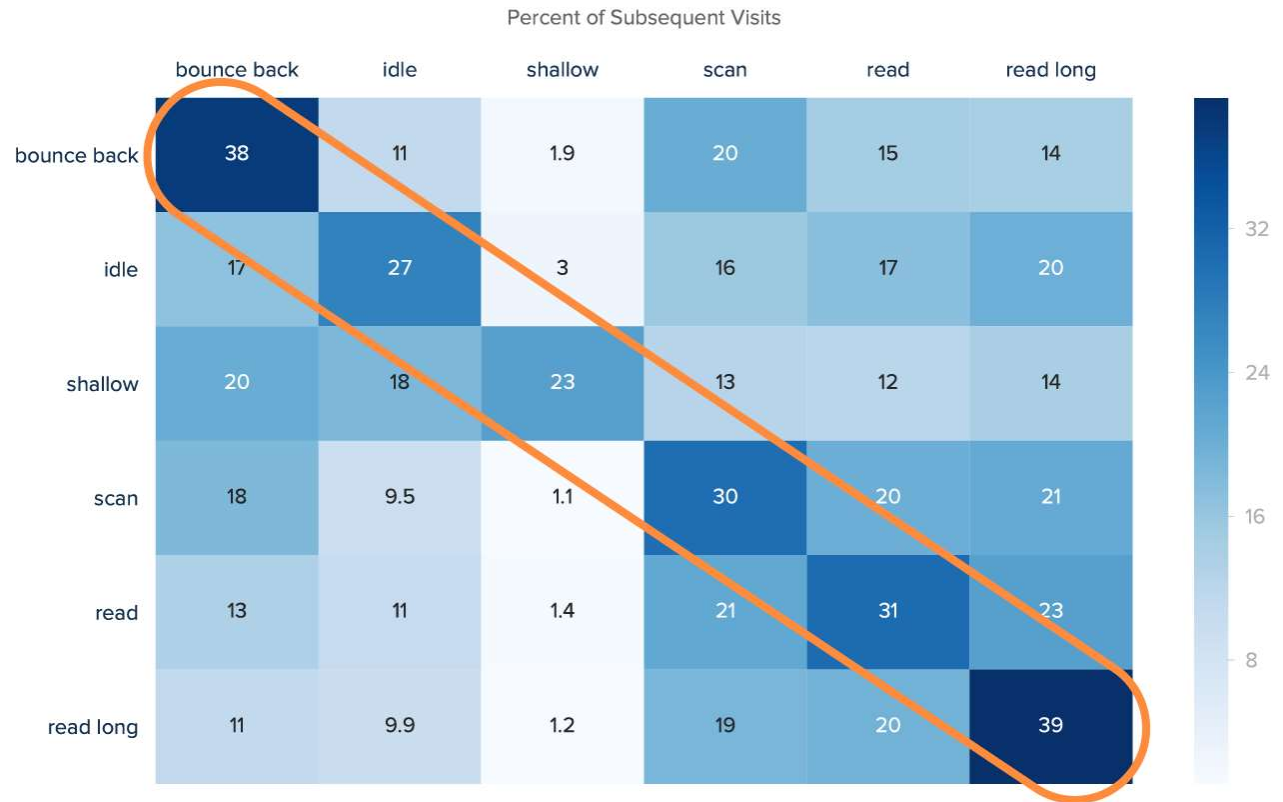
## ENGAGEMENT

Is past reading behavior predictive of subsequent reading?



## ENGAGEMENT

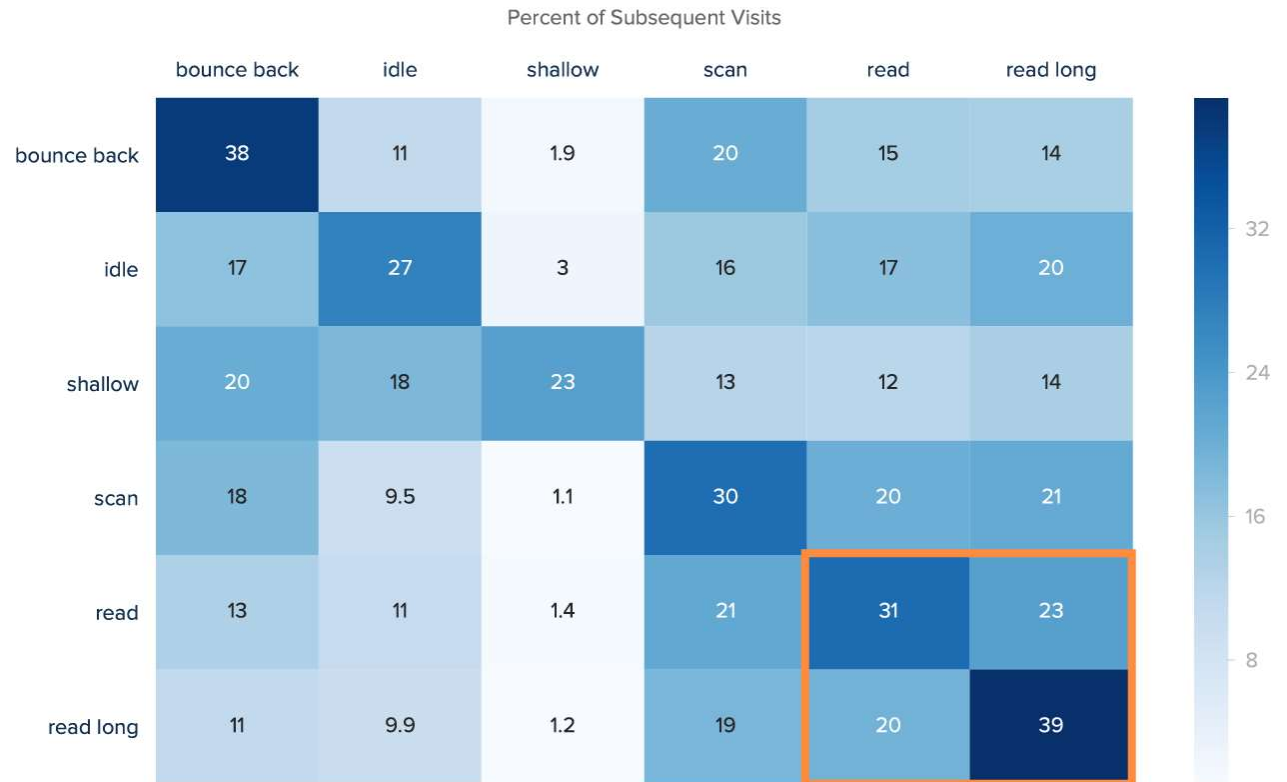
**Readers** are likely to exhibit the same behavior on their next visit



## ENGAGEMENT

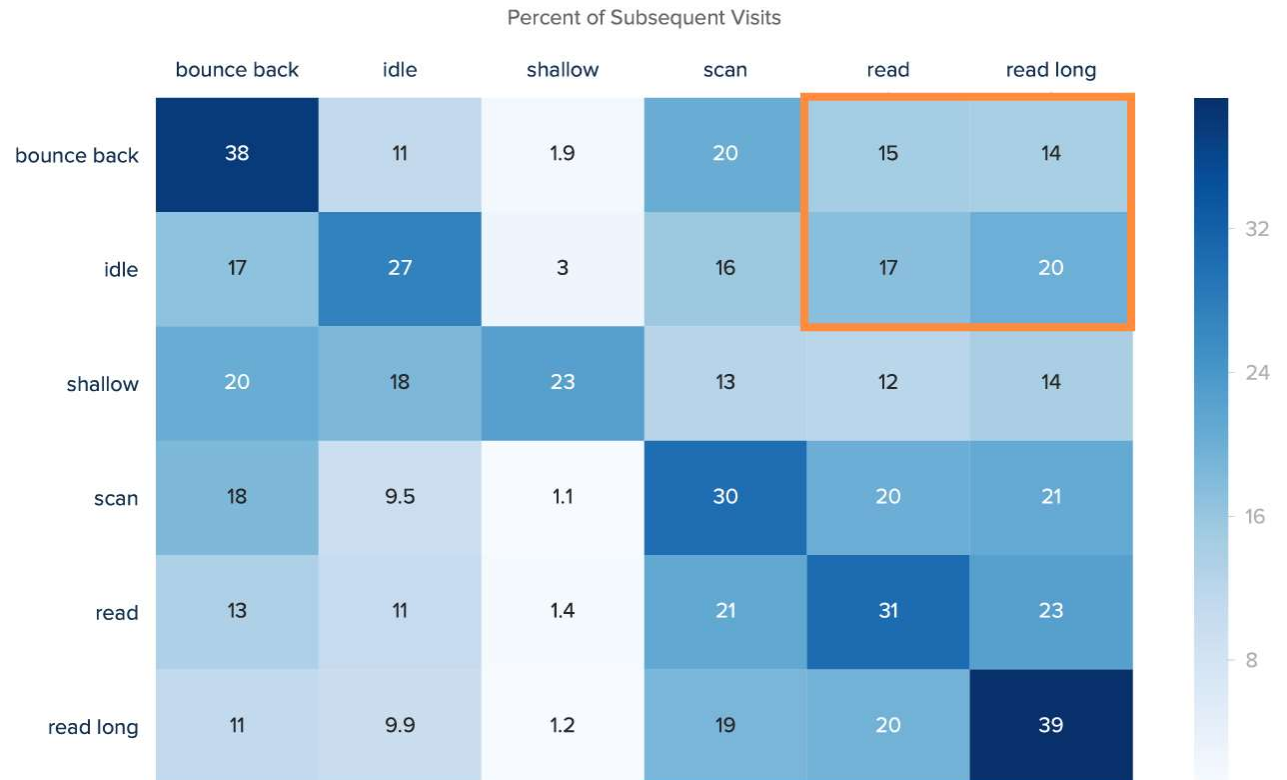
**Readers** are 54% more likely to read again next time

**Long readers** are 59% more likely to read again



## ENGAGEMENT

But, **low quality visitors** are much less likely to later become **readers**



## ENGAGEMENT

App visitors are  
**5.7x** more loyal  
than platform  
visitors

Traffic Source	Mobile Weekly Visits
Direct, app	9.2
Deep link & push, app	6.6
Direct, web	6.1
Facebook	1.9
Google Search	1.6
Chrome Suggestions	1.6
Twitter	1.6



## ENGAGEMENT

And, amazingly,  
mobile visitors exhibit  
**more loyalty** across  
the board

Traffic Source	Mobile Weekly Visits	Desktop Weekly Visits
Direct, app	9.2	N/A
Deep link & push, app	6.6	N/A
Direct, web	6.1	5.4
Facebook	1.9	1.4
Google Search	1.6	1.6
Chrome Suggestions	1.6	N/A
Twitter	1.6	1.4



## IN SUM

1. Content discovery is changing
  - Social is no longer the main way mobile visitors read
  - Google Search and Direct traffic are the largest sources of traffic
2. There is a new class of referrers emerging
  - Mobile portals are the fastest growing segment of referrers
3. Mobile readers are equally (or even more) engaged, and more loyal
  - The mobile reading experience is different: are we doing enough?



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# Thank you.

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## REFERRERS

Google traffic to AMP pages has grown much faster than to non-AMP and AMP is now in the majority.

But non-AMP sites have grown in 2018 as well.

