

The 2016 U.S.
**MOBILE
APP
REPORT**



About this report

The 2016 U.S. Mobile App Report leverages several data sources unique to comScore:

- The report is based primarily on behavioral measurement from [comScore Media Metrix® Multi-Platform](#), which provides deduplicated reporting of digital audiences across desktop computers, smartphones and tablets, and [comScore Mobile Metrix®](#), which provides deduplicated reporting of mobile web and app audiences across both smartphones and tablets. The report also includes survey-based data from [comScore MobiLens®](#).
- Custom analytics data derived from the aforementioned products' data streams is also included.
- The report also incorporates results from a survey of 1,049 smartphone users to understand their habits.

Important Definitions:

- Any reference to “mobile” means the combination of smartphone and tablet. When data is referring specifically smartphones or tablets, it will be labeled accordingly.
- All mobile data is based on Age 18+ population.
- A “unique visitor” is a person who visits an app or digital media property at least once over the course of a month. This metric, in app parlance, is equivalent to a “monthly active user/MAU”. A “daily visitor” is similar to a “daily active user/DAU.”

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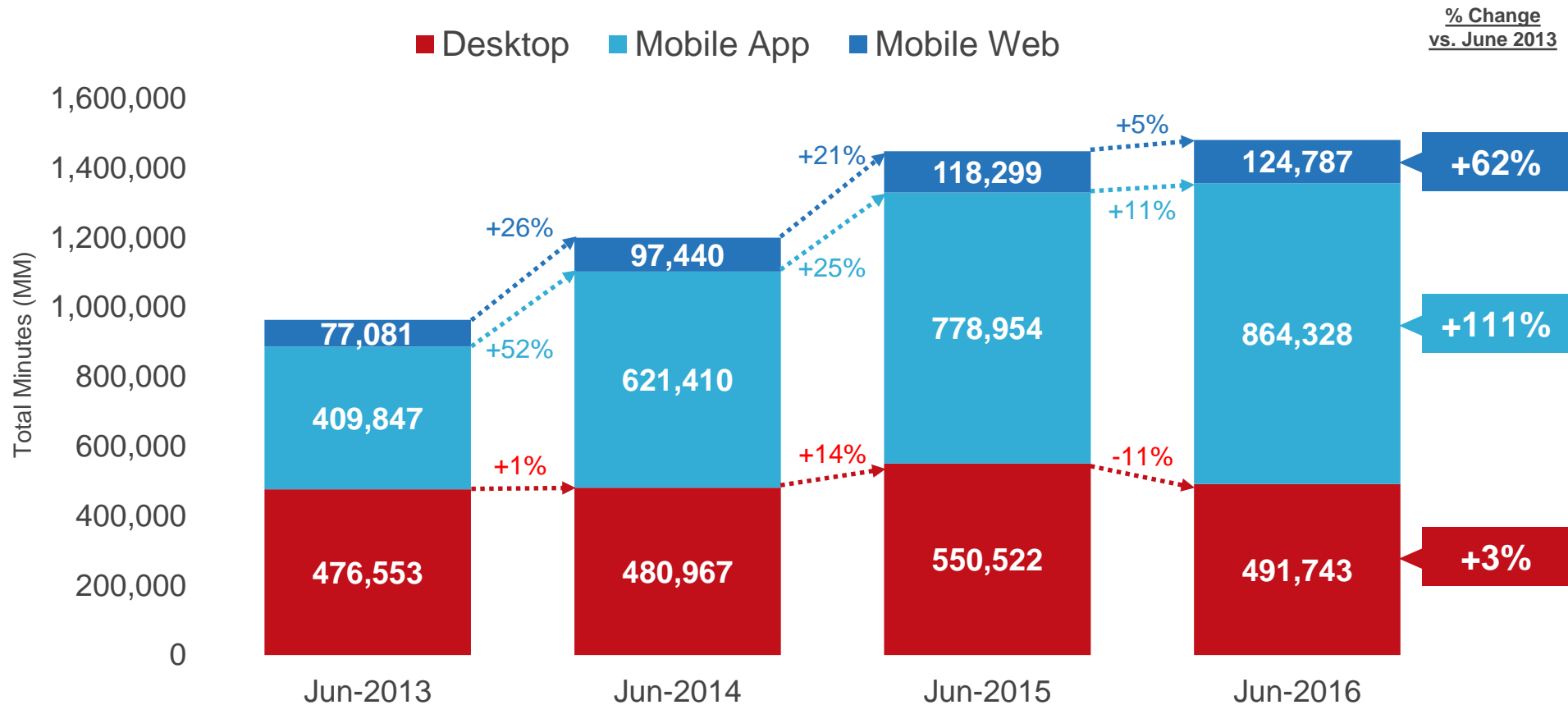
App Overview



Digital media usage time, driven by mobile apps, has exploded since 2013, but growth across all platforms is beginning to slow.

Growth in Digital Media Time Spent

Source: comScore Media Metrix Multi-Platform & Mobile Metrix, U.S., Total Audience



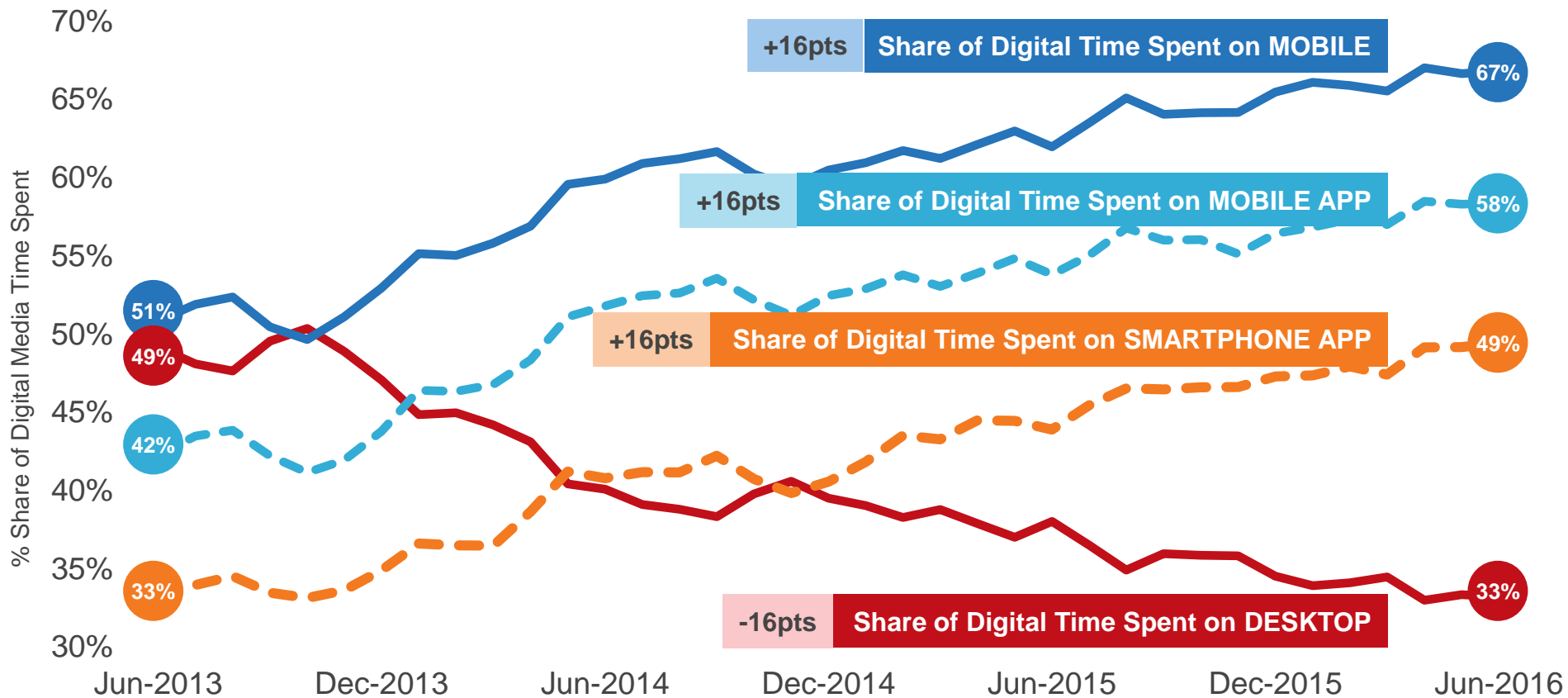
INSIGHT

Over the past three years, total digital media time spent has grown 53%, driven mostly by mobile apps and, to a lesser extent, mobile web. The past year has seen healthy but weaker growth rates on mobile, while desktop usage has actually declined by 11%.

Mobile now represents almost 2 out of 3 digital media minutes, and mobile apps are approaching 60% of total digital time spent.

Share of Digital Media Time Spent by Platform

Source: comScore Media Metrix Multi-Platform & Mobile Metrix, U.S., Total Audience



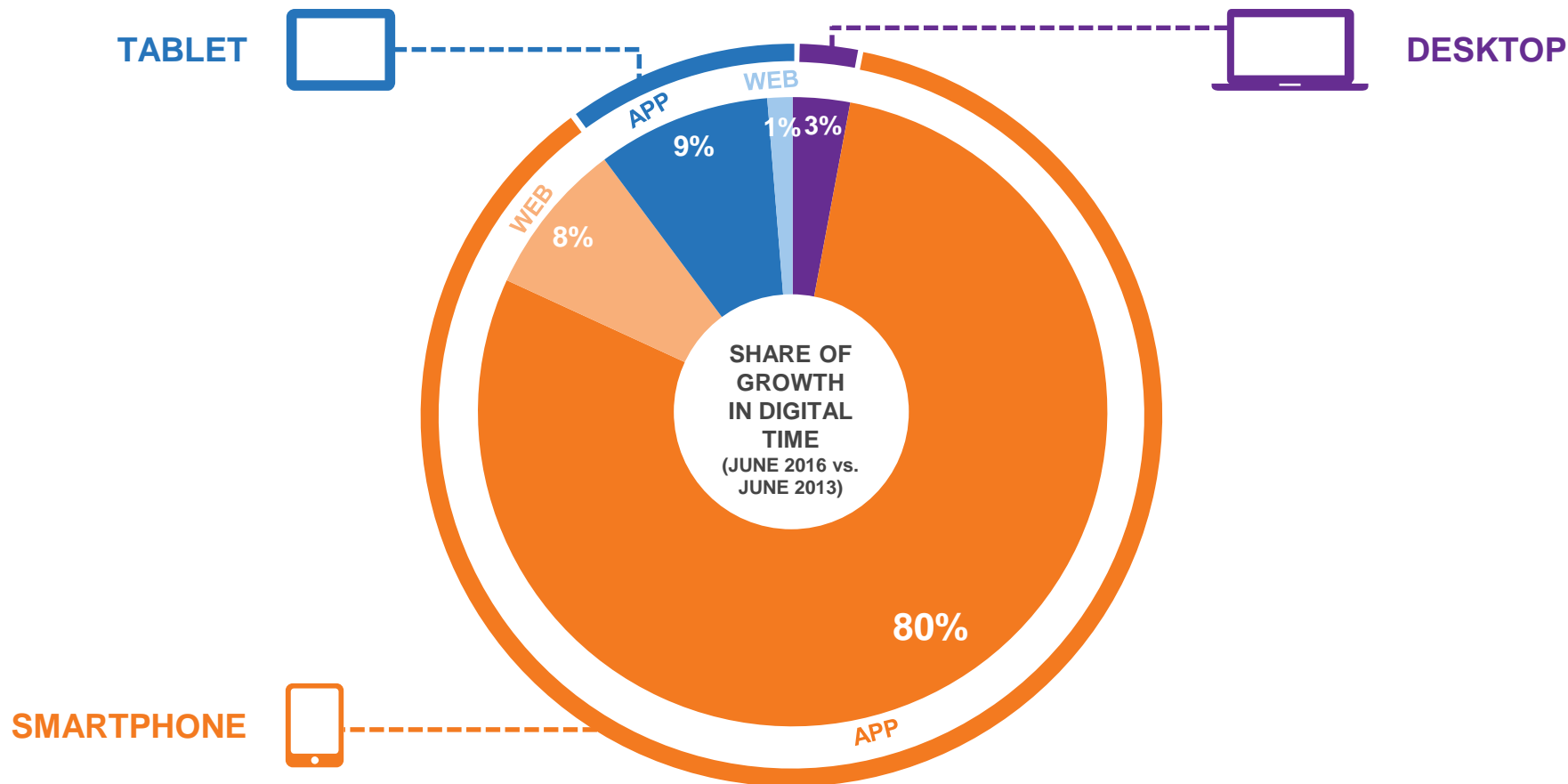
INSIGHT

With desktop engagement finally in decline, it is now losing share to mobile at a rapid rate. The convenience of smartphones and tablet devices, and the innovation around mobile apps have completely shifted the digital media landscape in favor of mobile.

Smartphone apps have driven the overwhelming majority of growth in digital media usage over the past 3 years.

Share of Growth in Total Digital Time Spent: June 2016 vs. June 2013

Source: comScore Media Metrix Multi-Platform & Mobile Metrix, U.S., Total Audience



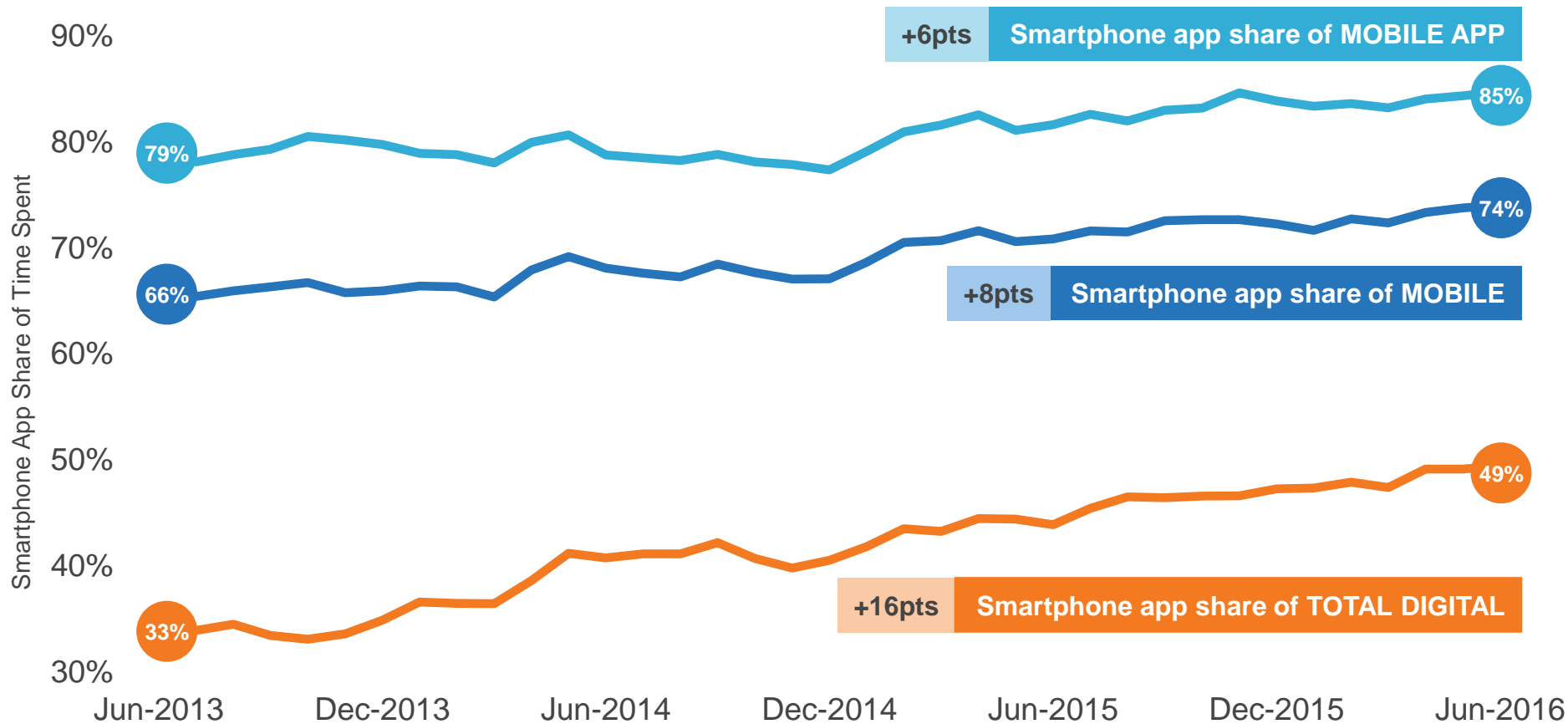
INSIGHT

While every component is contributing to digital's massive growth in time spent over the past three years, it is the smartphone app that has been the biggest driver by far. It has accounted for 80% of all growth in digital media engagement during that period of time.

In fact, smartphone apps alone now account for nearly half of all digital media time and 3 out of every 4 minutes on mobile in total.

Smartphone App Share of Platform Time Spent

Source: comScore Media Metrix Multi-Platform & Mobile Metrix, U.S., Total Audience



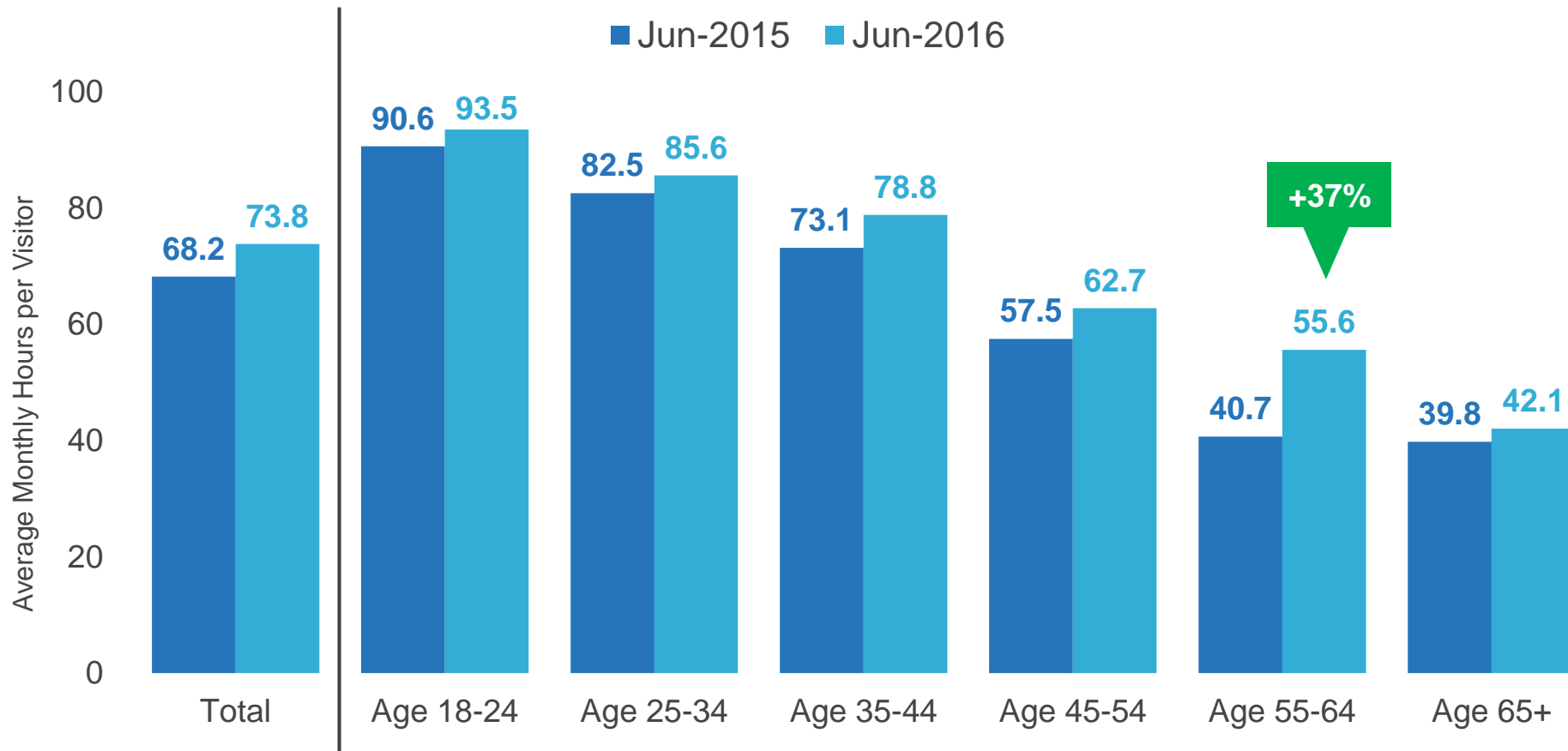
INSIGHT

Smartphone apps have become the primary access vehicle to the internet, representing half of total digital media time spent. They already account for the vast majority of total mobile and mobile app time spent and are gaining share among every segment of the market.

Smartphone app usage time is increasing among every age group in the past year and is highest among Millennials.

Average Monthly Hours per Smartphone App Visitor by Age

Source: comScore Mobile Metrix, U.S., Age 18+



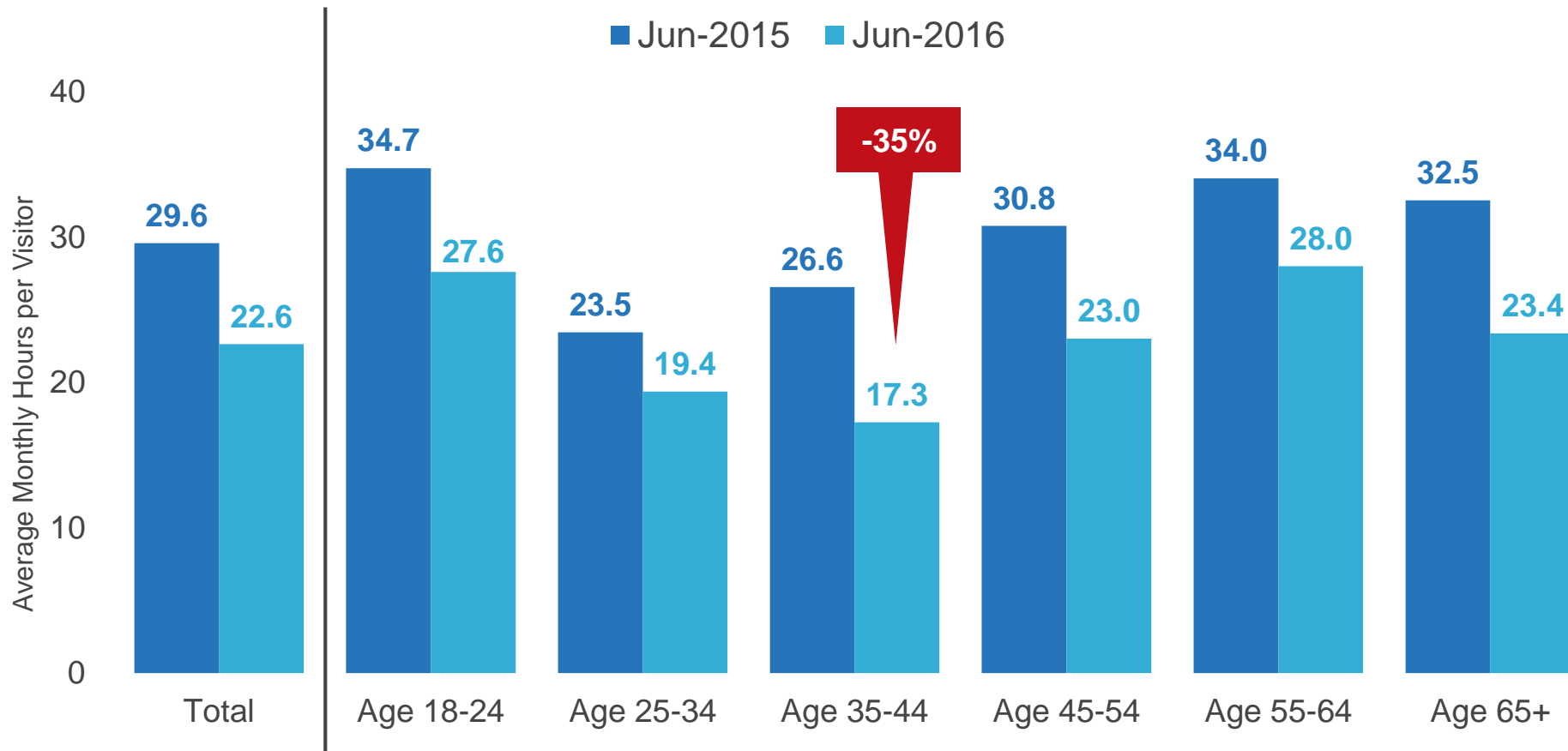
INSIGHT

Millennials spend an exorbitant amount of time on their smartphone apps, and usage declines with age. However, every segment of the population is using their smartphone apps more over time, with 55-64 year-olds seeing the greatest year-over-year increase with growth of 37%.

Unlike smartphones, tablets are seeing across-the-board declines in app usage as large screen phones encroach on their territory.

Average Monthly Hours per Tablet App Visitor by Age

Source: comScore Mobile Metrix, U.S., Age 18+



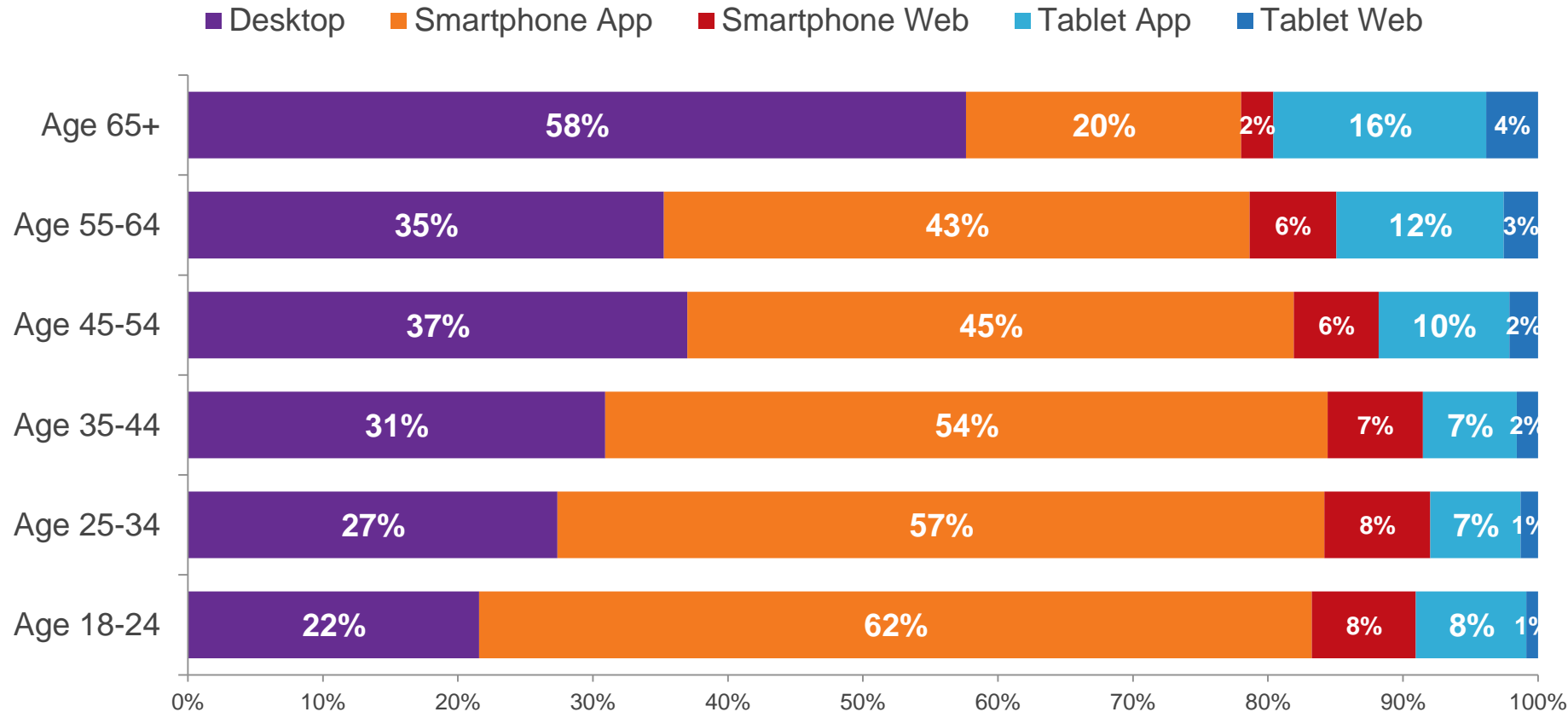
INSIGHT

Tablet app usage was down across the board in the past year, but the biggest drop came among 35-44 year-olds. Interestingly, the most engaged tablet users are both the youngest and oldest segments of the population. 18-24 year-olds make use of tablet apps for games, entertainment and school activities, while older users rely on tablets for news and reading.

Smartphone apps already drive the majority of web usage for 18-44 year-olds and are nearing that level for all but the oldest web users.

Share of Platform Time Spent by Age

Source: comScore Media Metrix Multi-Platform & Mobile Metrix, U.S., Age 18+, June 2016



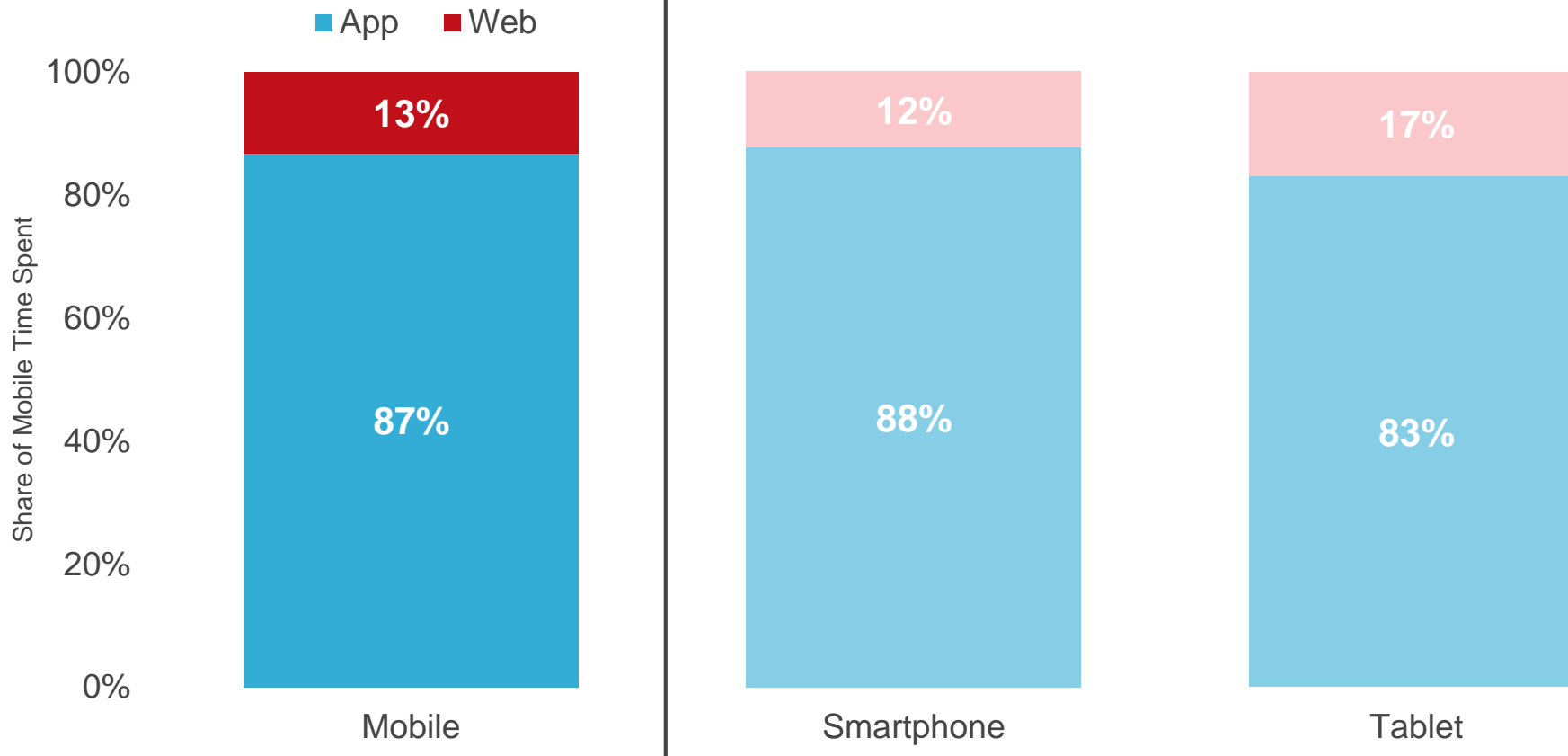
INSIGHT

Younger consumers spend the largest share of their time on smartphone apps, but nearly every group outside of the oldest segment prefers this platform. Possibly due to familiarity and their larger screens, desktop and tablets have a higher share of engagement as users get older.

Mobile app continues to outpace mobile web by a 7:1 margin in time spent, a ratio that has held constant for the past two years.

Share of Time Spent on Mobile: App vs. Web

Source: comScore Mobile Metrix, U.S., Age 18+, June 2016



INSIGHT

Mobile time spent continues to be dominated by apps, and has maintained the same ratio of app to mobile web time the past two years. Tablets have a higher percentage of activity happen on the browser, given its more comparable screen size to desktop and a lighter selection of tablet-optimized apps.



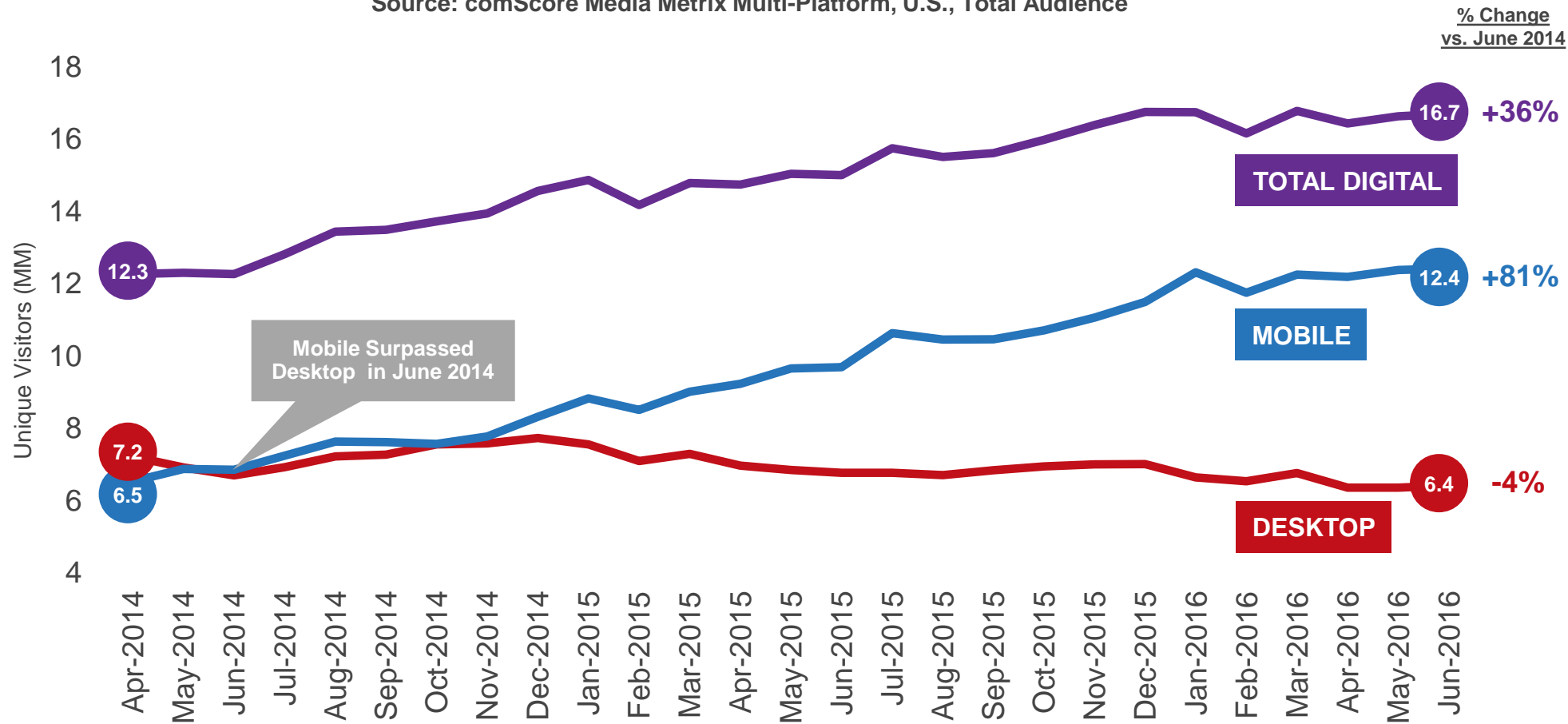
Mobile App vs. Mobile Web Audiences



In the past two years, the average Top 1000 digital media property's audience is up 36% due to huge gains in mobile audiences.

Avg. Monthly Audience for Top 1000 Properties for Total Digital, Mobile, and Desktop

Source: comScore Media Metrix Multi-Platform, U.S., Total Audience



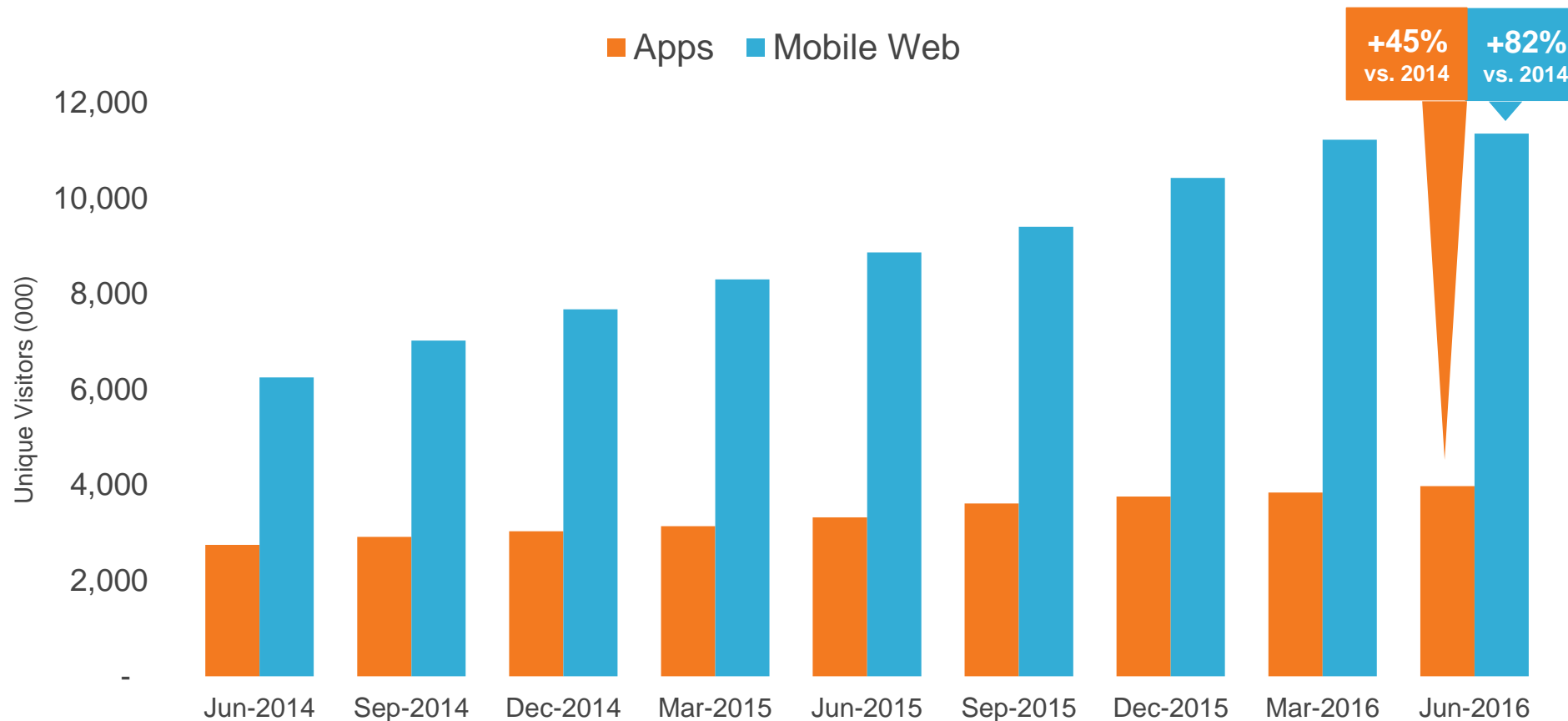
INSIGHT

Over the past year, average digital audience size has grown 36% among the top 1000 properties. Mobile audiences have grown 81% in that time vs. a 4% decline on desktop. Mobile audiences first passed desktop in June 2014 and within two years have doubled those on desktop.

And mobile audience growth is being driven more by mobile web properties, which are actually bigger and growing faster than apps.

Average Monthly Audience: Top 1000 Mobile Apps vs. Top 1000 Mobile Web Properties

Source: comScore Mobile Metrix, U.S., Age 18+



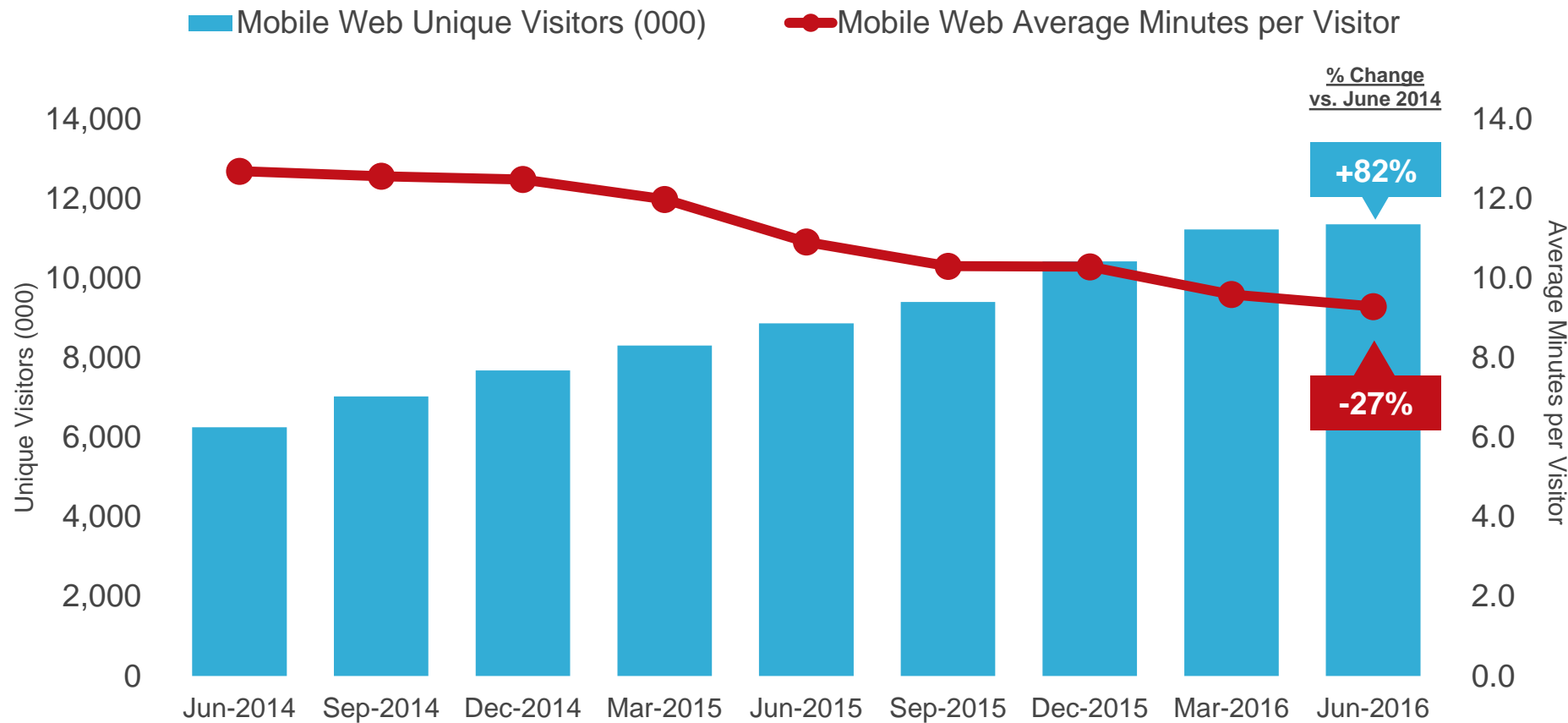
INSIGHT

A comparison of the Top 1000 Apps vs. the Top 1000 Mobile Web Properties shows that despite apps dominance in usage time, mobile web is responsible for big audiences on mobile. Mobile web audiences are almost 3x the size and growing 2x as fast as app audiences.

But mobile web audiences also tend to be a mile wide and an inch deep. As audiences increase, average time on mobile web declines.

Top 1000 Mobile Web Properties: Average Audience and Time Spent Trend

Source: comScore Mobile Metrix, U.S., Age 18+



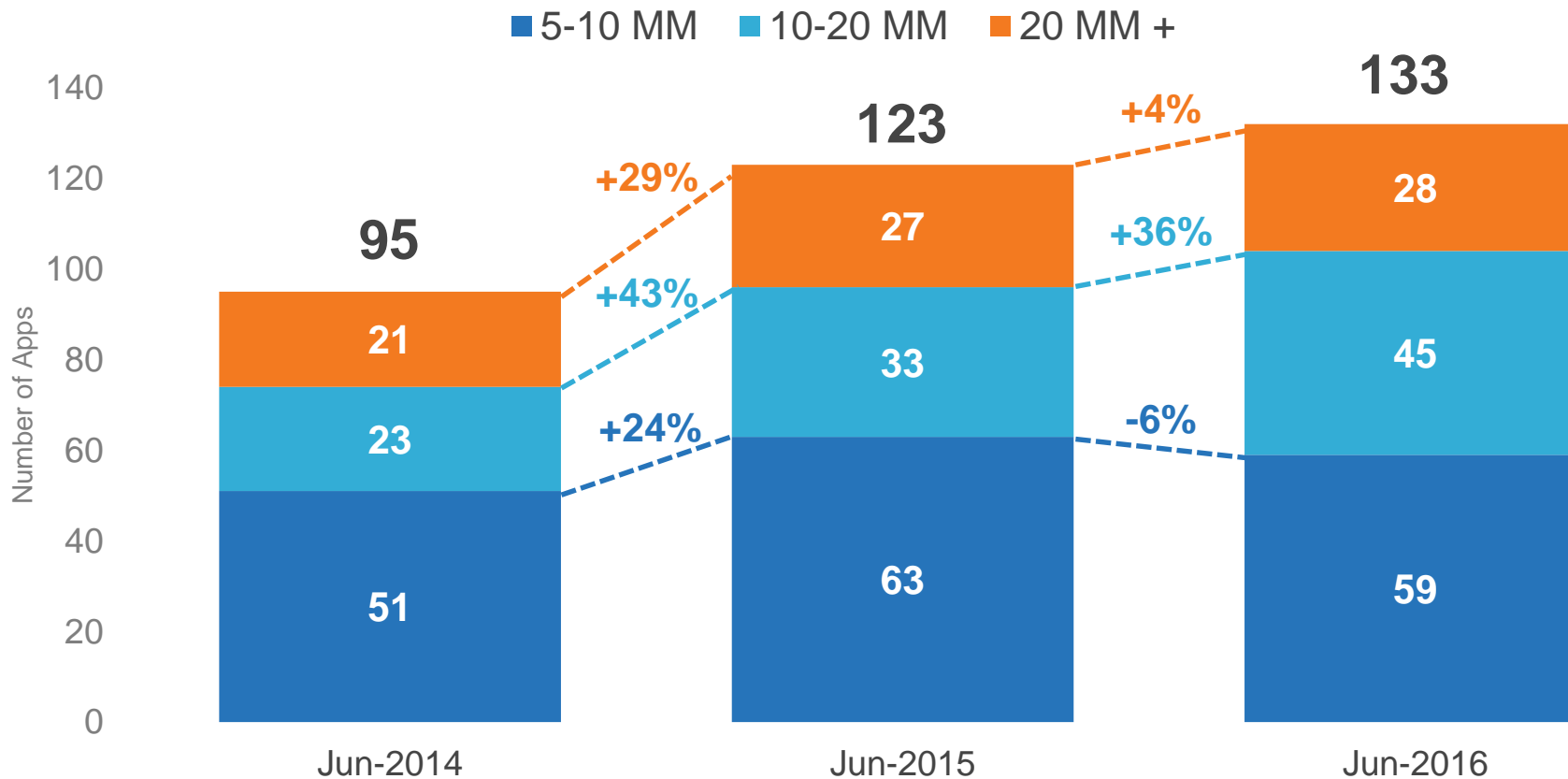
INSIGHT

Mobile web audiences continue to climb, but the new audiences being reached are lightly engaged and bring down the average time spent figures. Much of this new traffic is drive-by social referral. While this traffic can help establish larger audience reach for mobile media properties, there may also be limits to the advertising opportunity it creates if users don't return.

Meanwhile, app audiences are growing, with the number of apps reaching 5+ million users up dramatically from 2014.

Number of Mobile Apps That Reached Unique Visitor Milestones

Source: comScore Mobile Metrix, U.S., Age 18+



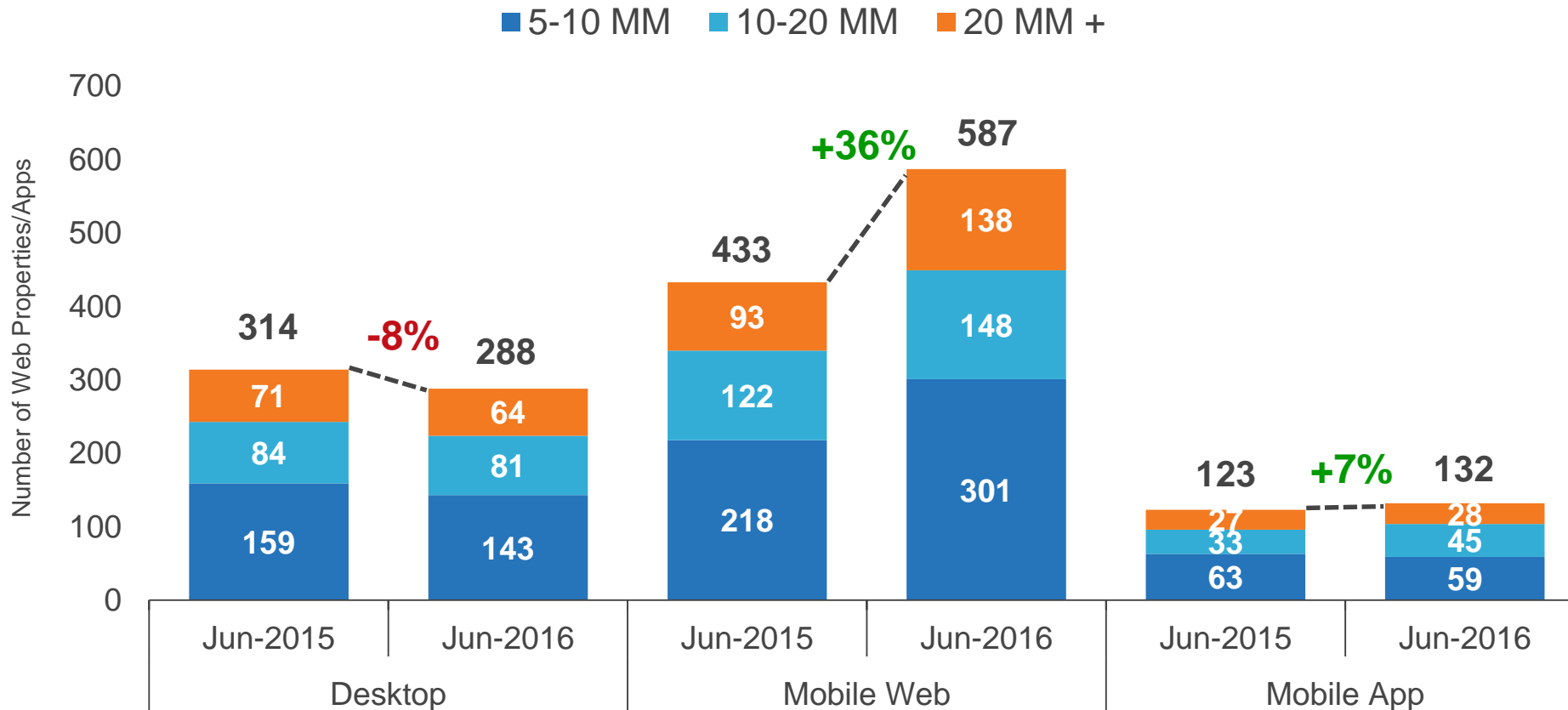
INSIGHT

The growing number of mobile apps reaching large audiences proves that apps should not only be viewed in terms of engagement metrics alone. Big gains were observed in the number of apps with 10-20 MM users, signaling a strengthening in the second tier.

But, apps' walled garden environment makes reaching audience scale much harder than the more linkable desktop and mobile web.

Number of Web Properties vs. Mobile Apps That Reached Unique Visitor Milestones

Source: comScore Media Metrix Multi-Platform & Mobile Metrix, U.S., Total Audience



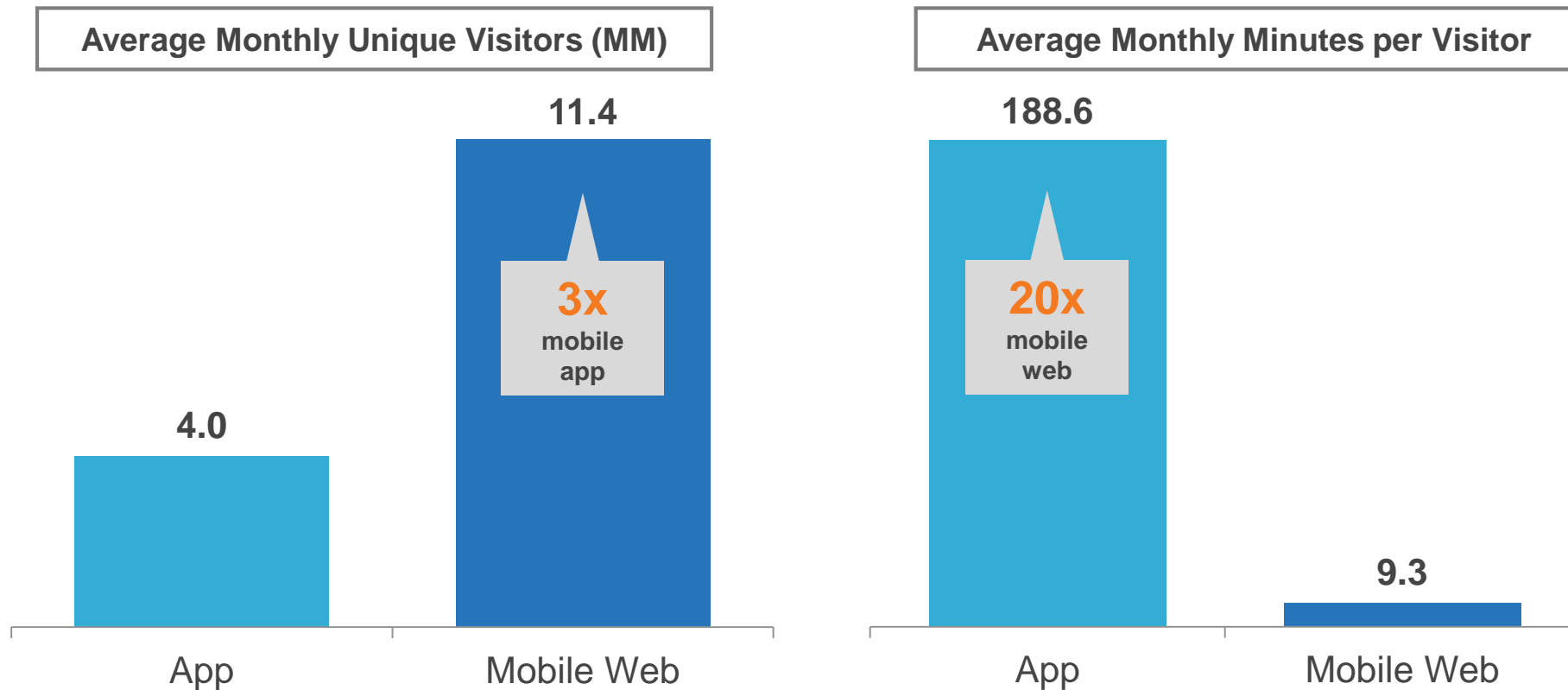
INSIGHT

Despite growing audiences on apps, the existing digital infrastructure makes it harder to build large audiences on apps than on the web. As evidenced, the mobile web has 4.5x more web properties with 5 million unique visitors than apps have, while also growing at a faster rate.

Establishing app audiences is harder, but their real value is in their loyalty. They spend 20x more time on apps than mobile web visitors.

Top 1000 Mobile Apps vs. Top 1000 Mobile Web Properties

Source: comScore Mobile Metrix, U.S., Age 18+, June 2016



INSIGHT

It may be more challenging to build a large audience on apps, but those app users are a very loyal bunch. They spend more than 3 hours per month on the Top 1000 apps on average – about 20x greater than what mobile web visitors spend on their Top 1000 properties.



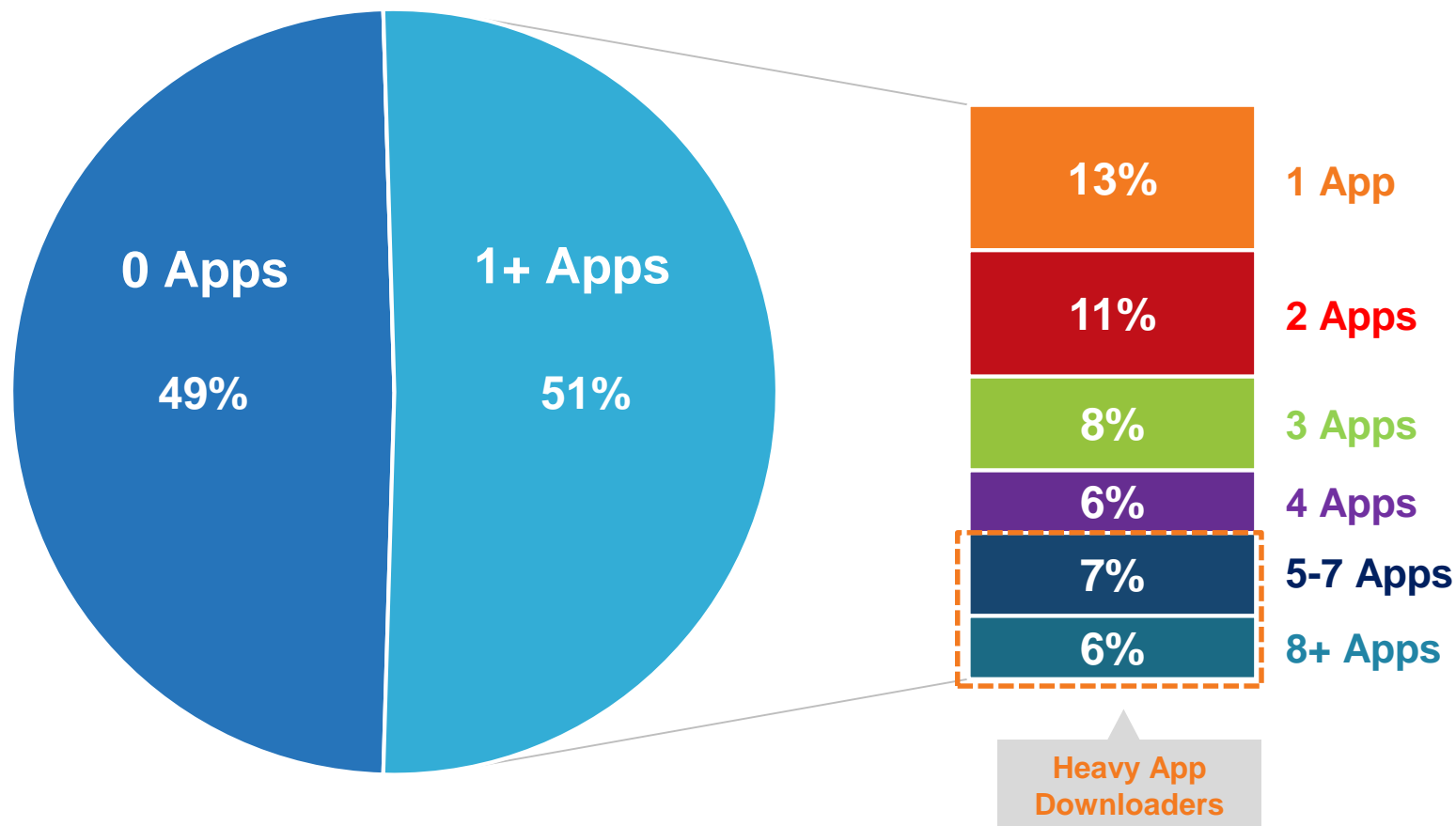
App User Habits



Have we reached 'peak app'? Nearly half of smartphone users don't download any apps in a month, and the average user downloads two.

Smartphone Users' Number of App Downloads Per Month

Source: comScore MobiLens, U.S., Age 13+, 3 Month Average Ending June 2016



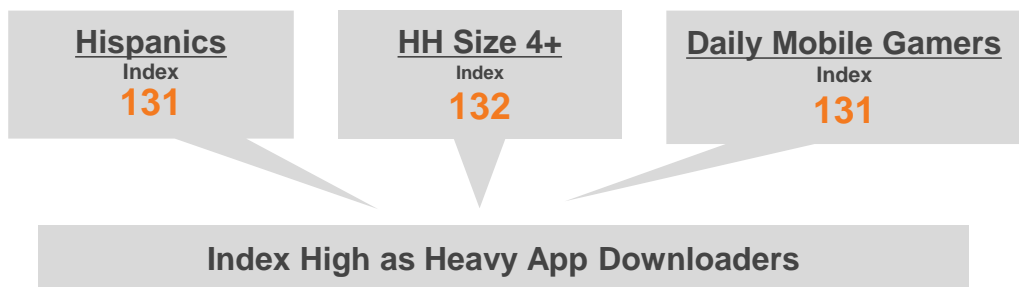
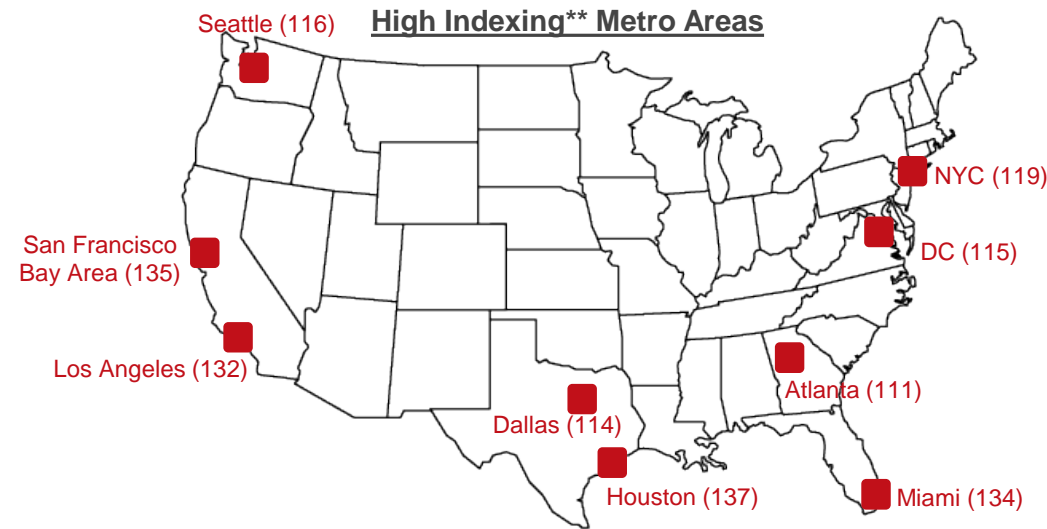
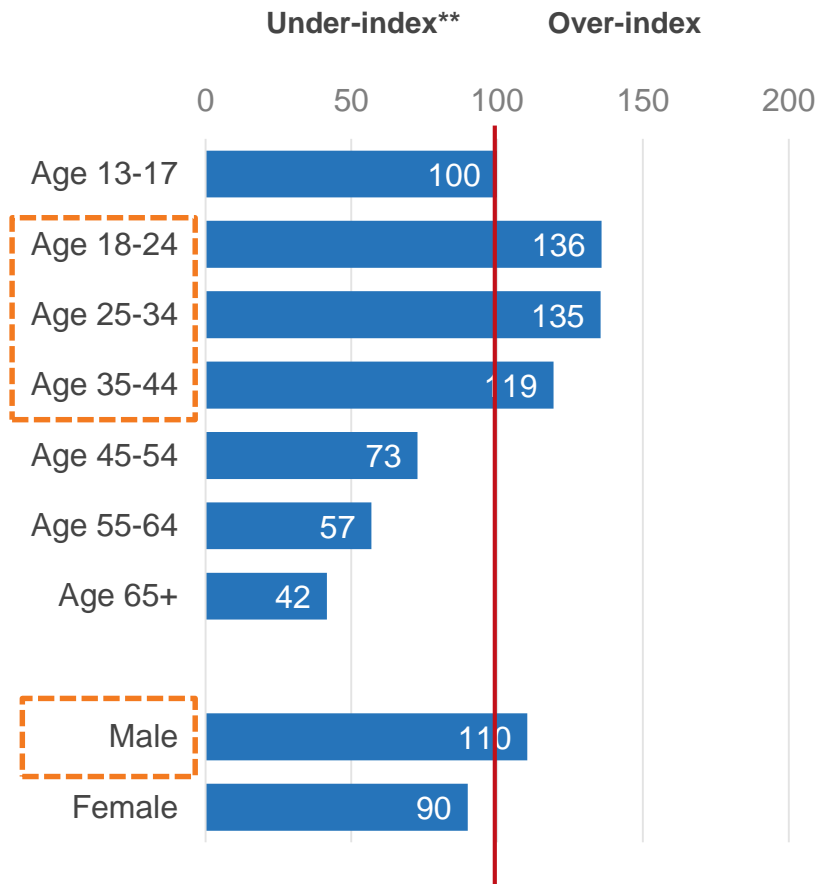
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Of those who do download apps during the course of a month, the average number downloaded per person is 3.5. However, the total number of app downloads is highly concentrated at the top, with 13% of smartphone owners accounting for more than half of all download activity in a given month.

18-44 year-old males are the most likely to be 'heavy app downloaders' who test-drive at least 5 new apps each month.

Demographic Profile of Heavy App Downloaders*

Source: comScore MobiLens, U.S., Age 13+, 3 Month Average Ending June 2016



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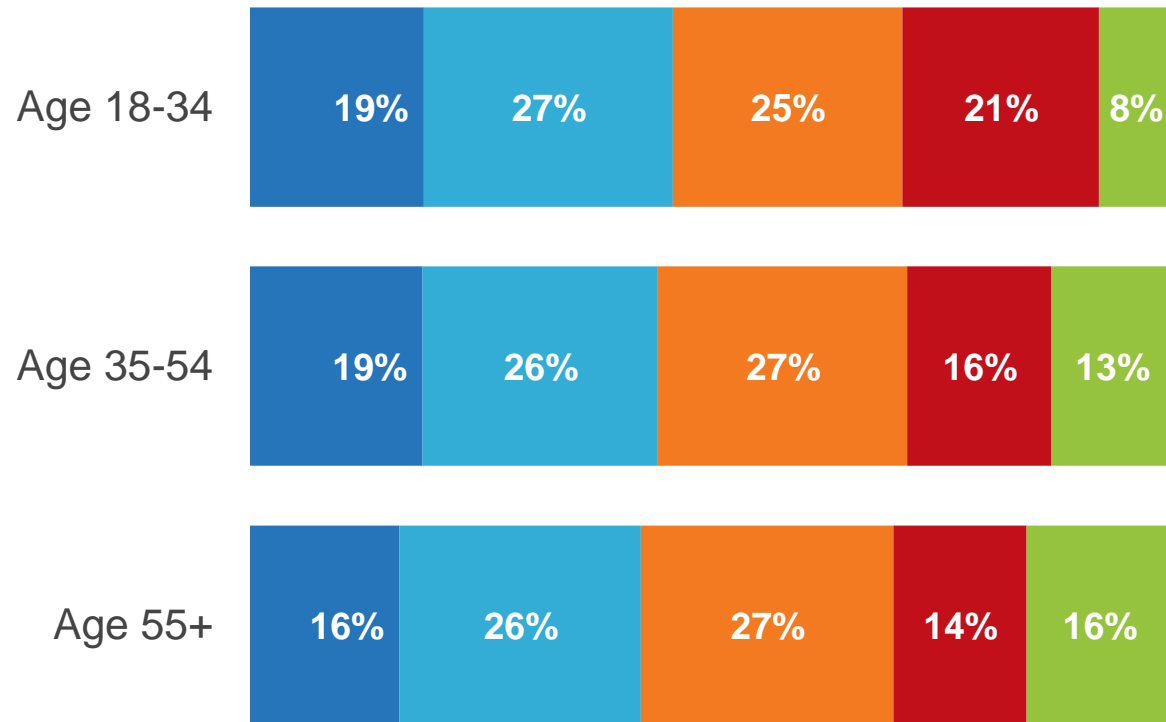
Those who download 5+ apps per month are more likely to exhibit certain demographic characteristics, such as being 18-44 years old, male, and Hispanic. They are also much more likely to be into mobile gaming and come from certain urban centers, such as Houston, San Francisco, Miami and Los Angeles.

The heaviest downloaders organize apps into folders, as most people limit their number of screens with apps on them to 4 or less.

Number of Screens Featuring Apps on Users' Smartphones

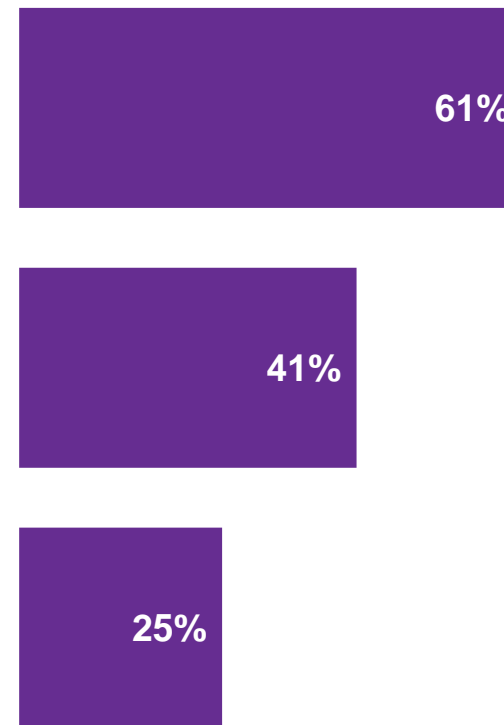
Source: comScore Custom Survey, U.S., Age 18+, August 2016

■ 1 Screen ■ 2 Screens ■ 3 Screens ■ 4 Screens ■ 5+ Screens



% of Smartphone Users Who Use App Folders

Source: comScore Custom Survey, U.S., Age 18+, August 2016



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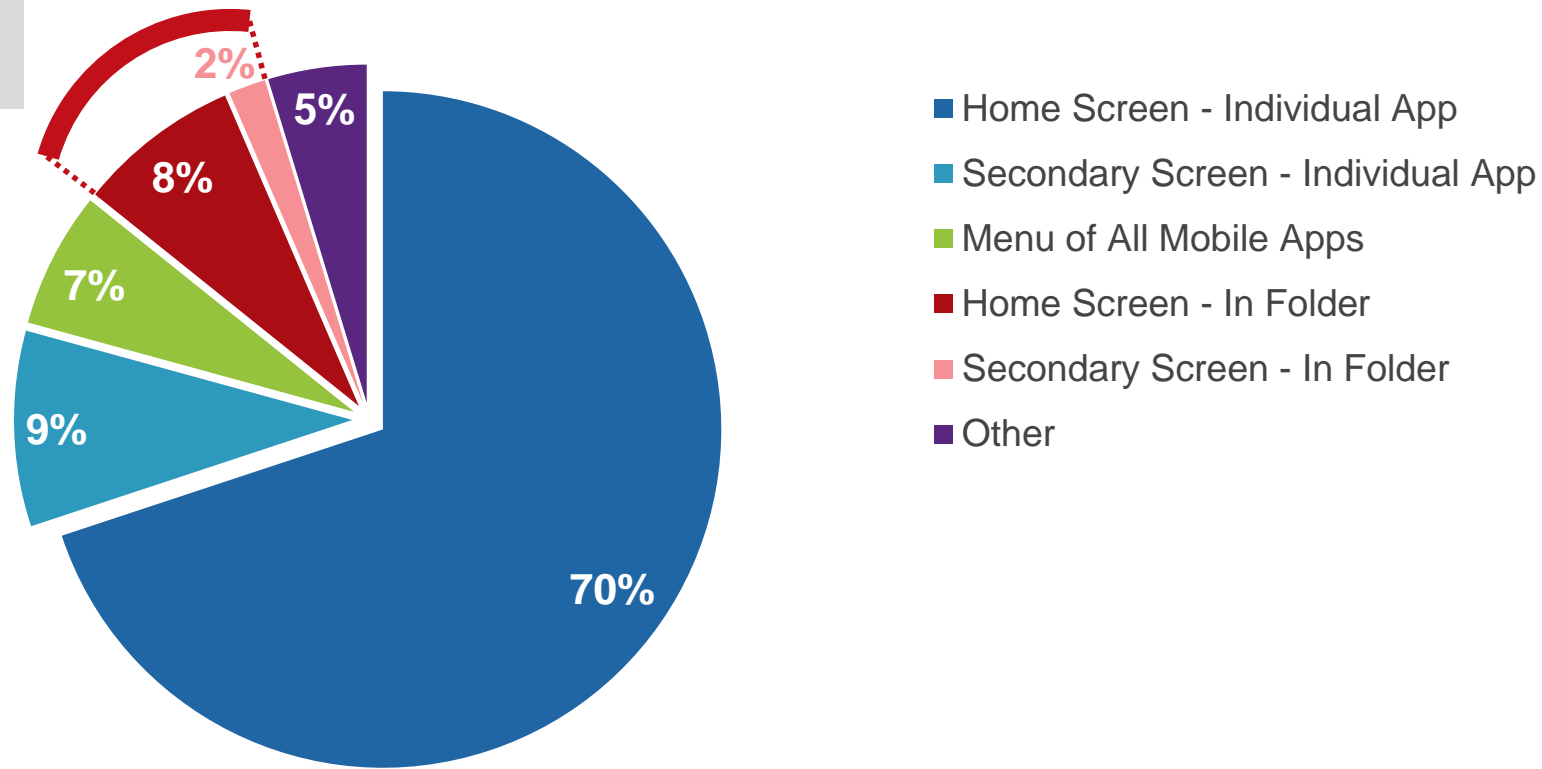
Given that 18-34 year-old Millennials tend to download the most apps and don't want more than 4 screens with apps, there is a stronger need to organize their apps into folders than older users. The percent of Millennial smartphone users who use folders actually increased 8 percentage points from last year.

7 in 10 smartphone users keep their most used app on the home screen, but there is a growing number who keep it in a folder.

Q: Where is the mobile app you use most often located?

Source: comScore Custom Survey, U.S., Age 18+, August 2016

In Folder
+3 pts
vs. Aug. 2015



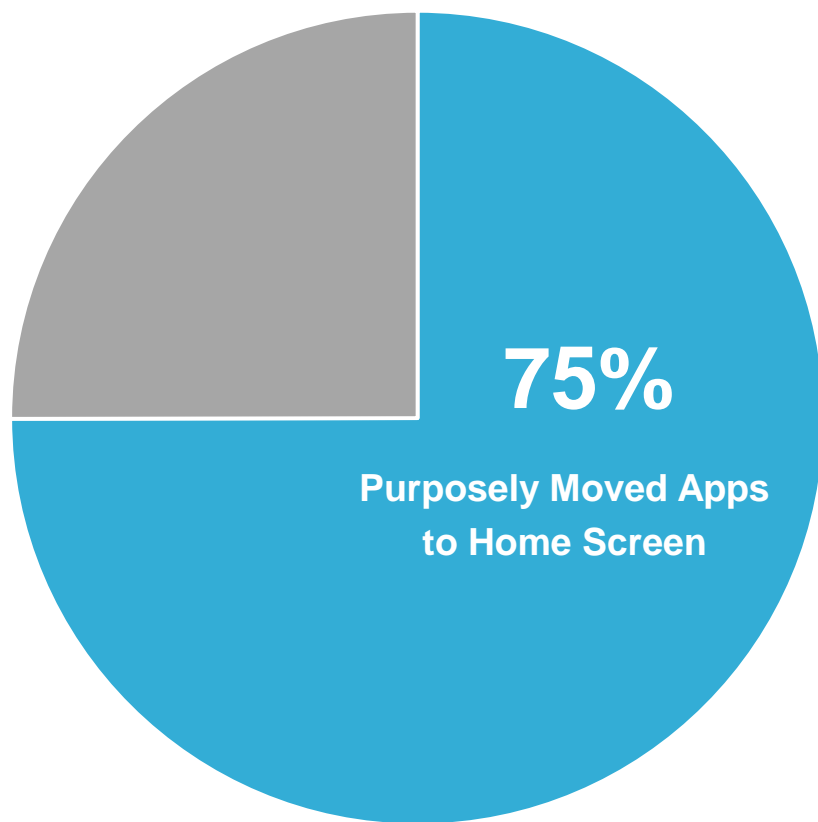
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7 out of 10 smartphone users prefer to keep their most frequently used app in the location with the least amount of friction on their phone – one click away on their home screen. Nearly 1 in 10 keep their most used app in a folder, which is up from 7% last year.

Smartphone home screen real estate is scarce, and frequency of usage determines which apps get promoted to this screen.

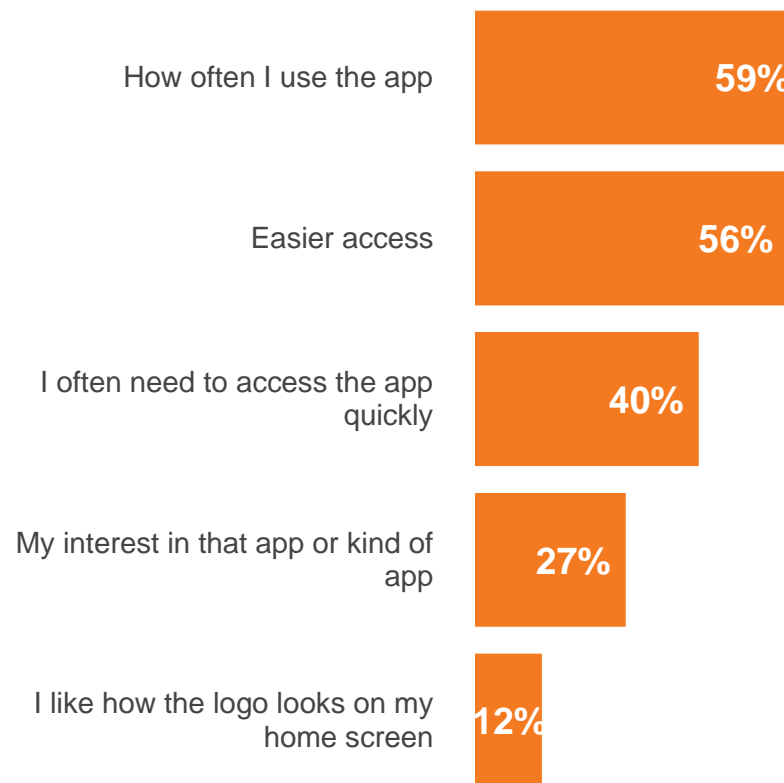
Percent of Users that Intentionally Move Apps to Home Screen

Source: comScore Custom Survey, U.S., Age 18+, August 2016



Top Factors Influencing Decision to Move Apps to Home Screen

Source: comScore Custom Survey, U.S., Age 18+, August 2016



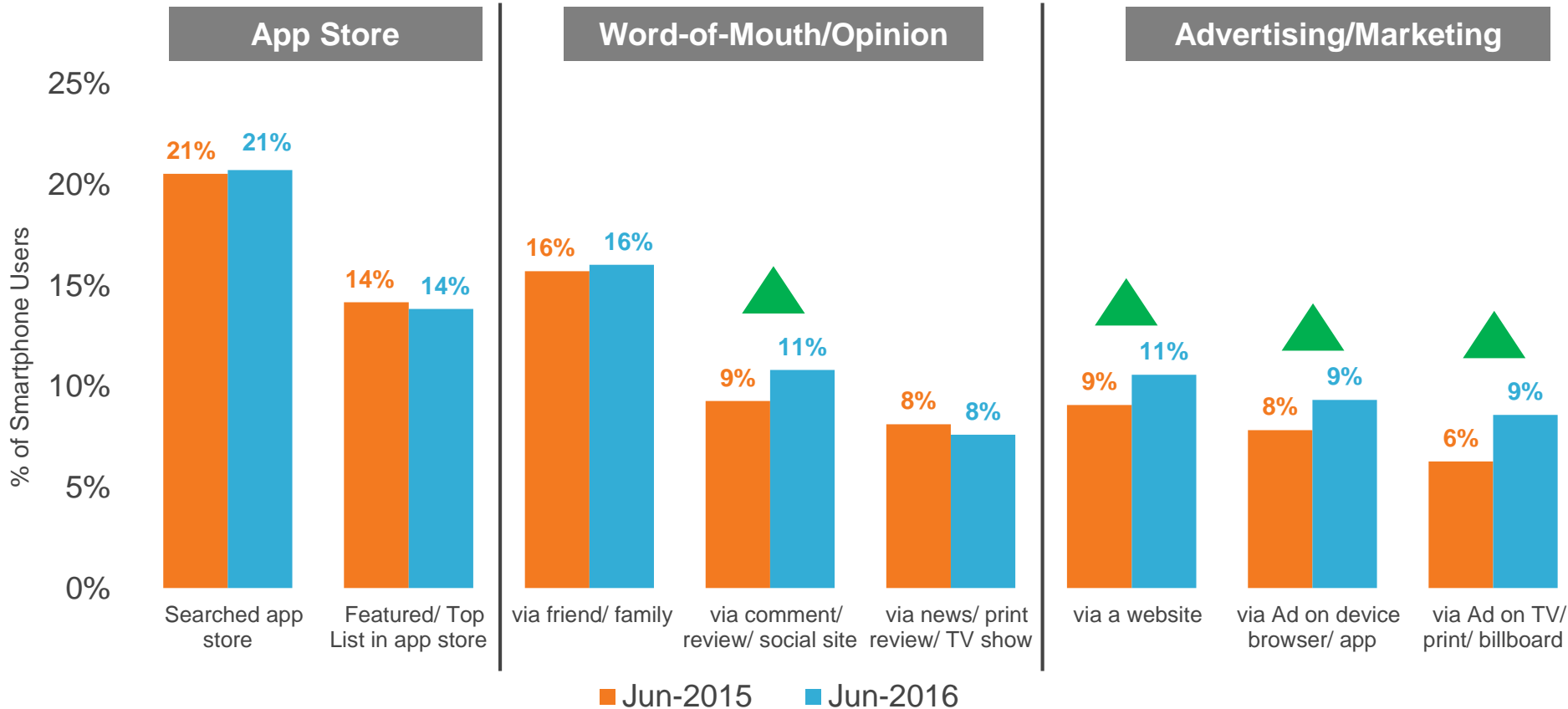
INSIGHT

3 out of 4 smartphone users made the effort to customize which apps appear on their home screen. The desire to access certain apps easily and rapidly are the key drivers in determining which apps get placed on the home screen.

Advertising and marketing is becoming a more important driver of app installs, while the app store's influence may have peaked.

Most Common App Discovery Channels Among Smartphone Users

Source: comScore MobiLens, U.S., Age 13+, 3 Month Average Ending June 2016 vs. June 2015



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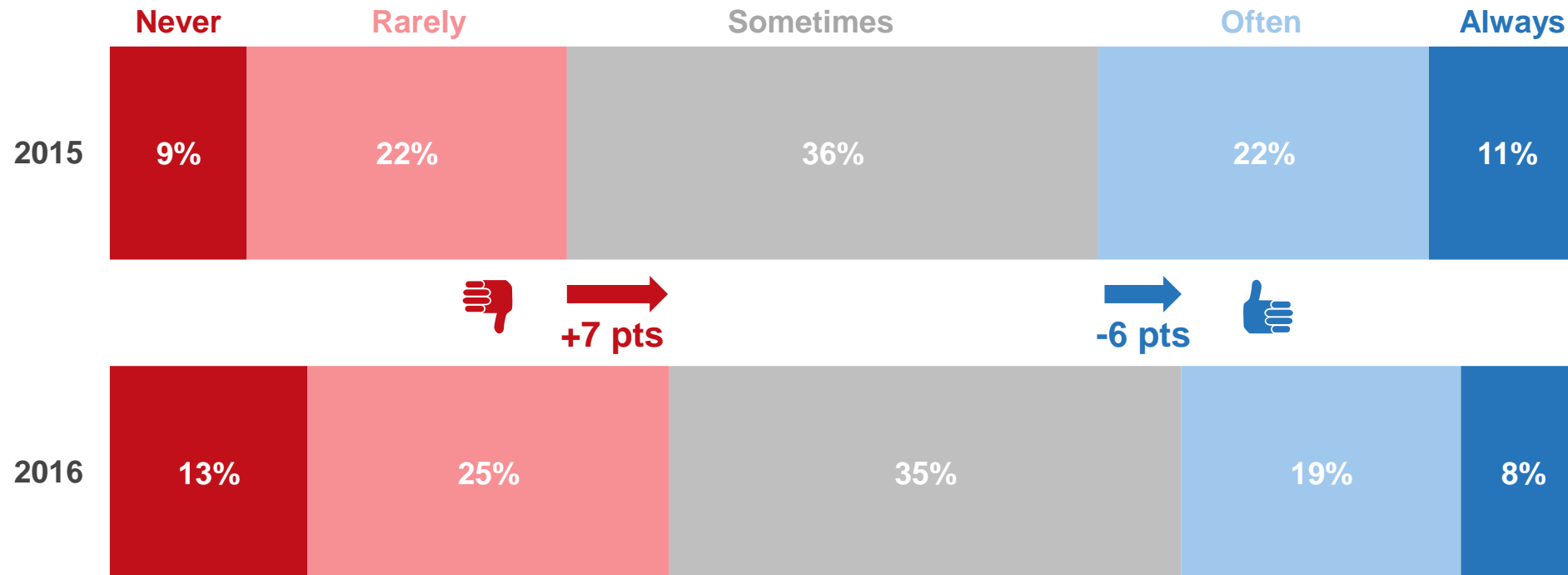
App acquisition appears to be moving from 'pull' to 'push'. App stores remain the most important method, but they are no longer growing in importance. Meanwhile, more users are now discovering apps from websites, digital ads and traditional media ads, highlighting the increasing importance of traditional push marketing for user acquisition.

Are smartphone users getting 'push notification fatigue'? In the past year, a much higher percentage are rejecting notifications.

INSIGHT

Q: How often do you agree to an app's request to allow push notifications?*

Source: comScore Custom Survey, U.S., Age 18+, August 2016

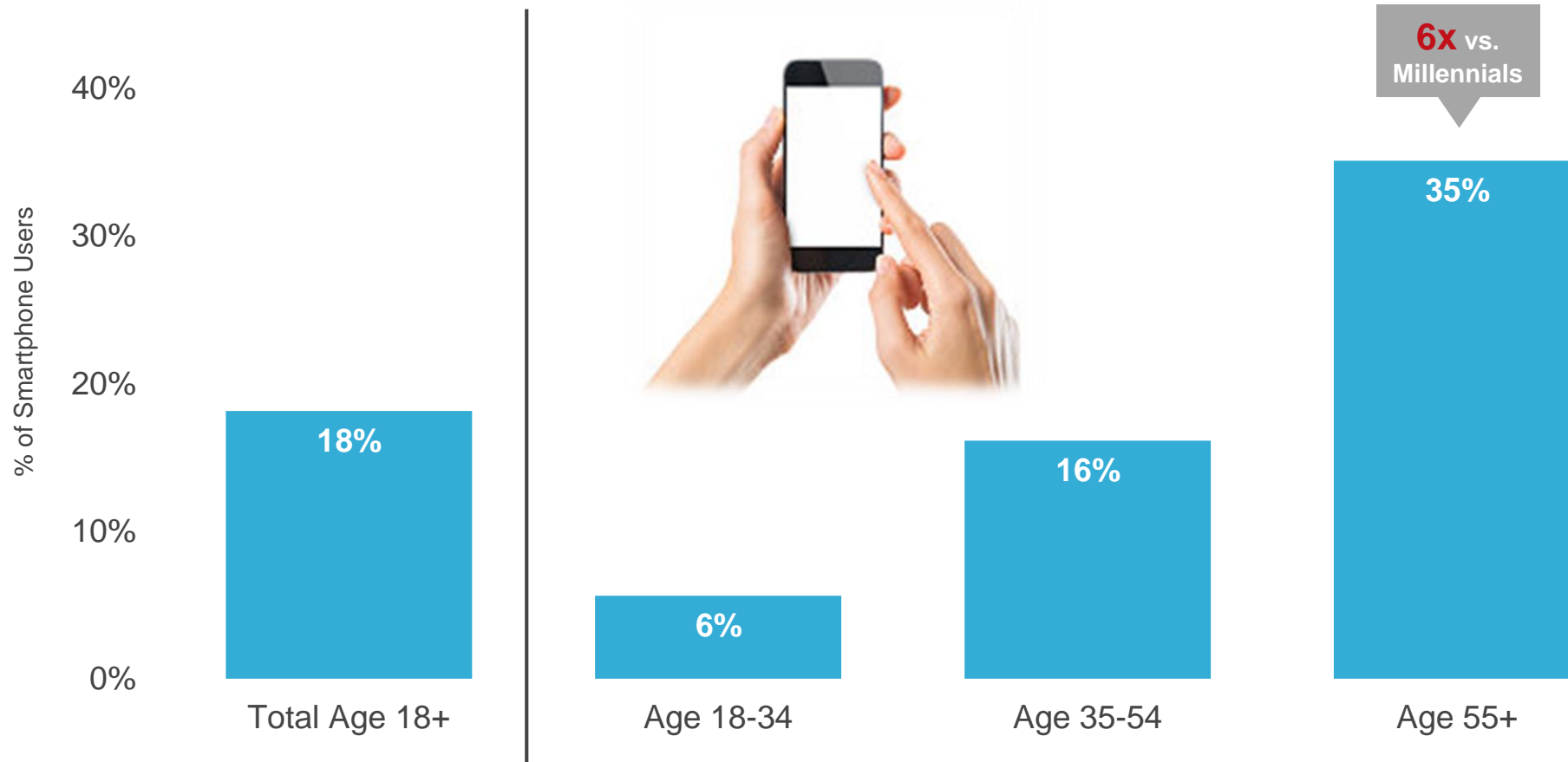


Push notifications are a crucial method for apps to keep its users actively engaged and from abandoning it over time. But as people download more apps, notifications will be prioritized for only the most important ones. 38% of users now claim they never or rarely agree to accept them, up from 31% last year.

Baby Boomers are 6x as likely as Millennials to only operate their smartphone with two hands.

% of Smartphone Users by Age Segment Who Only Operate Phone with Two Hands

Source: comScore Custom Survey, U.S., Age 18+, August 2016



INSIGHT

Higher levels of comfort and familiarity with the device and a greater tendency to multi-task drive Millennials' single-handed phone usage, while their parents' generation rely on both hands to navigate their phones.

Of one-handed smartphone users, Millennials are more likely to position apps on their phones based on 'thumb reach.'

% of One-Handed Smartphone Users who Consider Thumb Reach when Positioning Apps on Phone Screen*

Source: comScore Custom Survey, U.S., Age 18+, August 2016



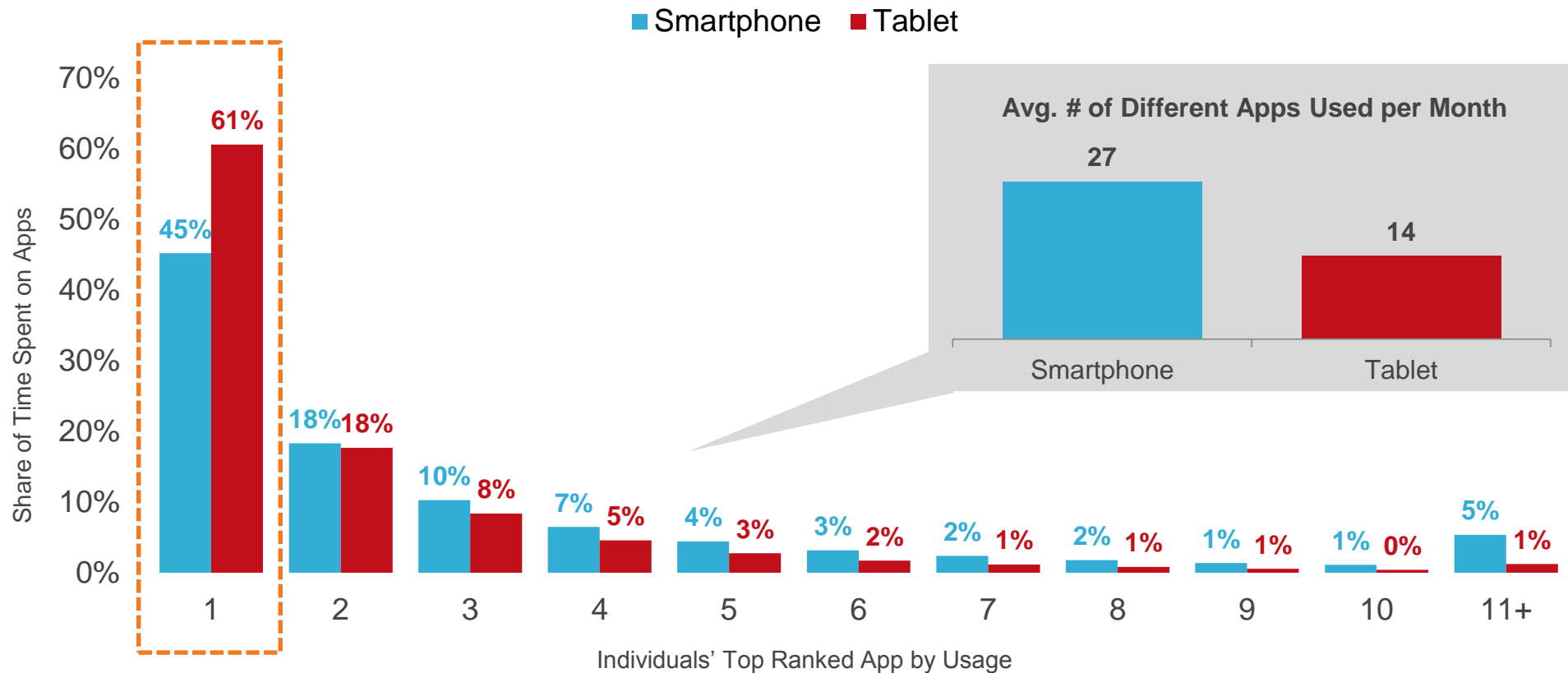
INSIGHT

A significant portion of one-handed smartphone users of all ages consider thumb reach when positioning apps on their phone. While overall it appears that thumb reach is an important consideration across all age groups, younger users tend to be more conscious of this variable.

Mobile users spend a really high percentage of their time on their #1 most used app, and about 9 out of 10 minutes within their Top 5.

Share of Individual Users' Time Spent on Apps by Rank

Source: comScore Custom Analytics, U.S., Age 18+, June 2016



INSIGHT

Smartphone users spend an astonishing 45% of their app time on their #1 most used app, and nearly three quarters of that time within their Top 3. Tablet users have even more concentrated activity, with 61% dedicated to their #1 app and 87% within their Top 3.



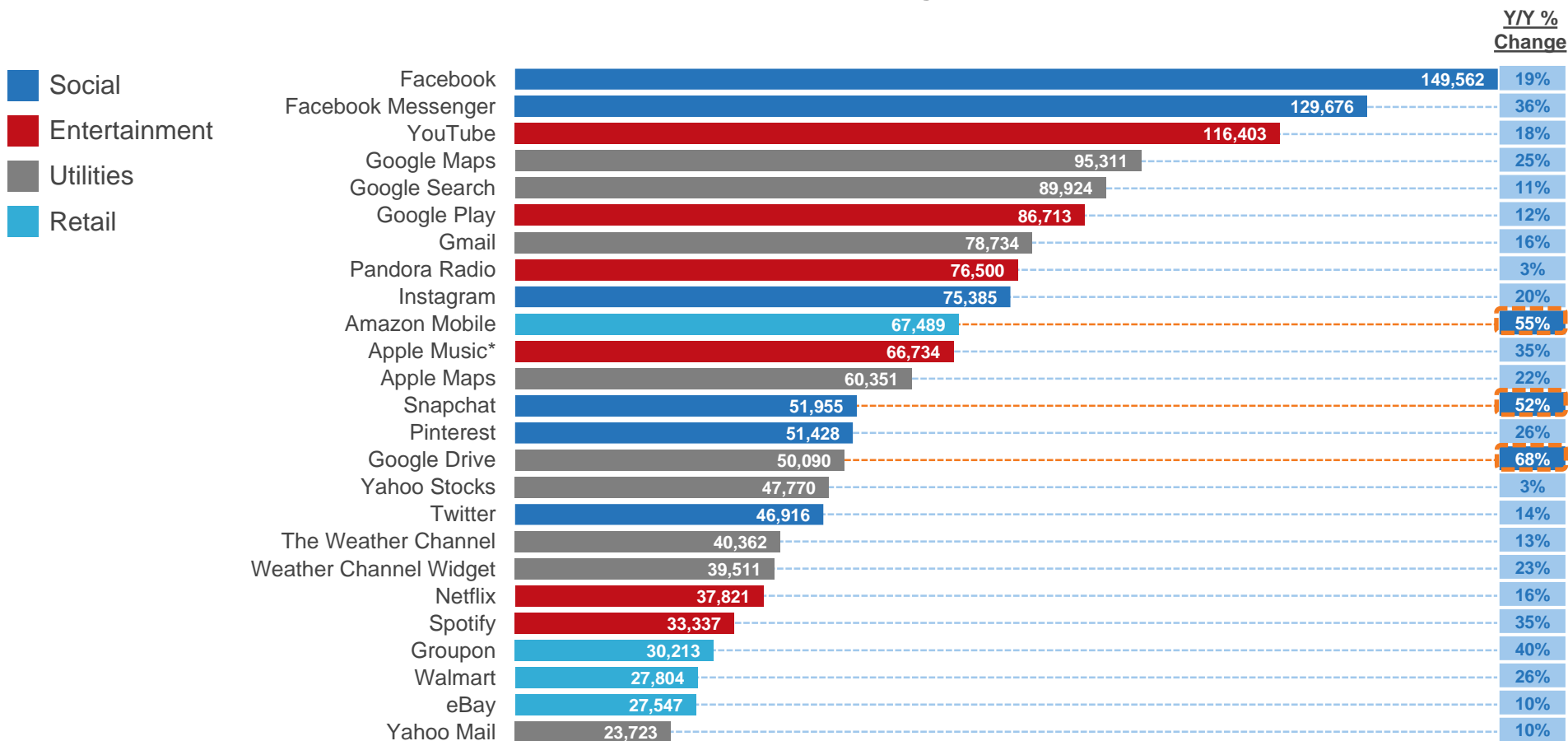
Top & Fast-Growing Apps



The Top 25 mobile apps are still dominated by the largest internet companies, with Facebook and Google owning the top of the list.

Top 25 Mobile Apps by Unique Visitors (000) with Y/Y Growth

Source: comScore Mobile Metrix, U.S., Age 18+, June 2016



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The Top 7 – and 8 of the Top 9 – apps are owned by Facebook or Google. The Top 25 apps can all be broadly classified as either Utilities (9), Social (6), Entertainment (6), or Retail (4), highlighting some of the most critical needs that apps fulfill. Despite some movement within the Top 25, the only new entrant to the list this year was Groupon.

Facebook's flagship mobile app ranks #1 on a number of dimensions and boasts some impressive usage stats.



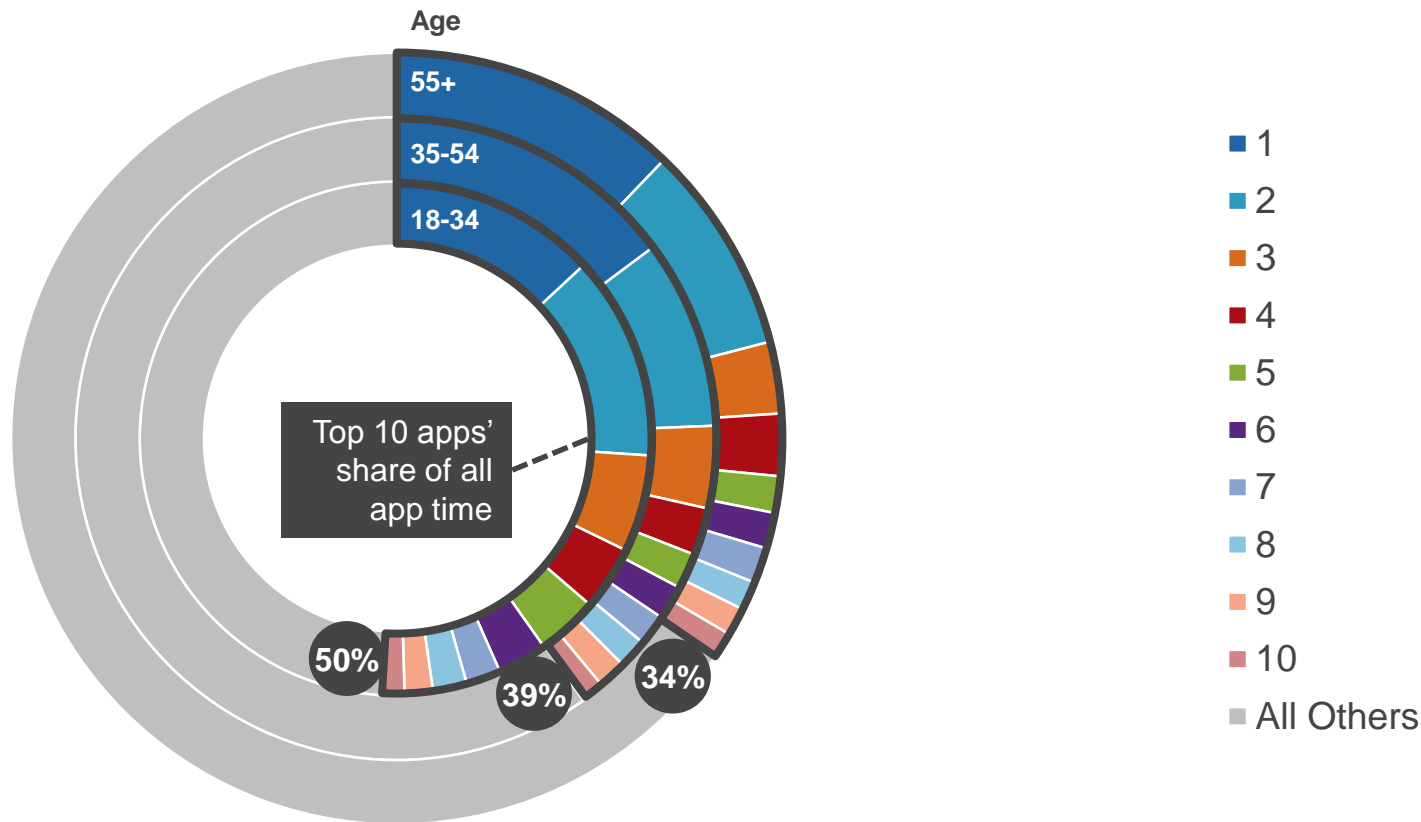
INSIGHT

The numbers demonstrate Facebook's immense influence in the app ecosystem and, more broadly, in mobile. Facebook's flagship app leads all other apps in total engagement, home screen incidence and, of course, audience reach – both among the total app population and Millennials.

Millennials concentrate more of their mobile app time within the Top 10 ranked apps in their cohort than older age groups do.

Top 10 Apps by Age Segment: Share of Total App Time Spent

Source: comScore Mobile Metrix, U.S., Age 18+, June 2016



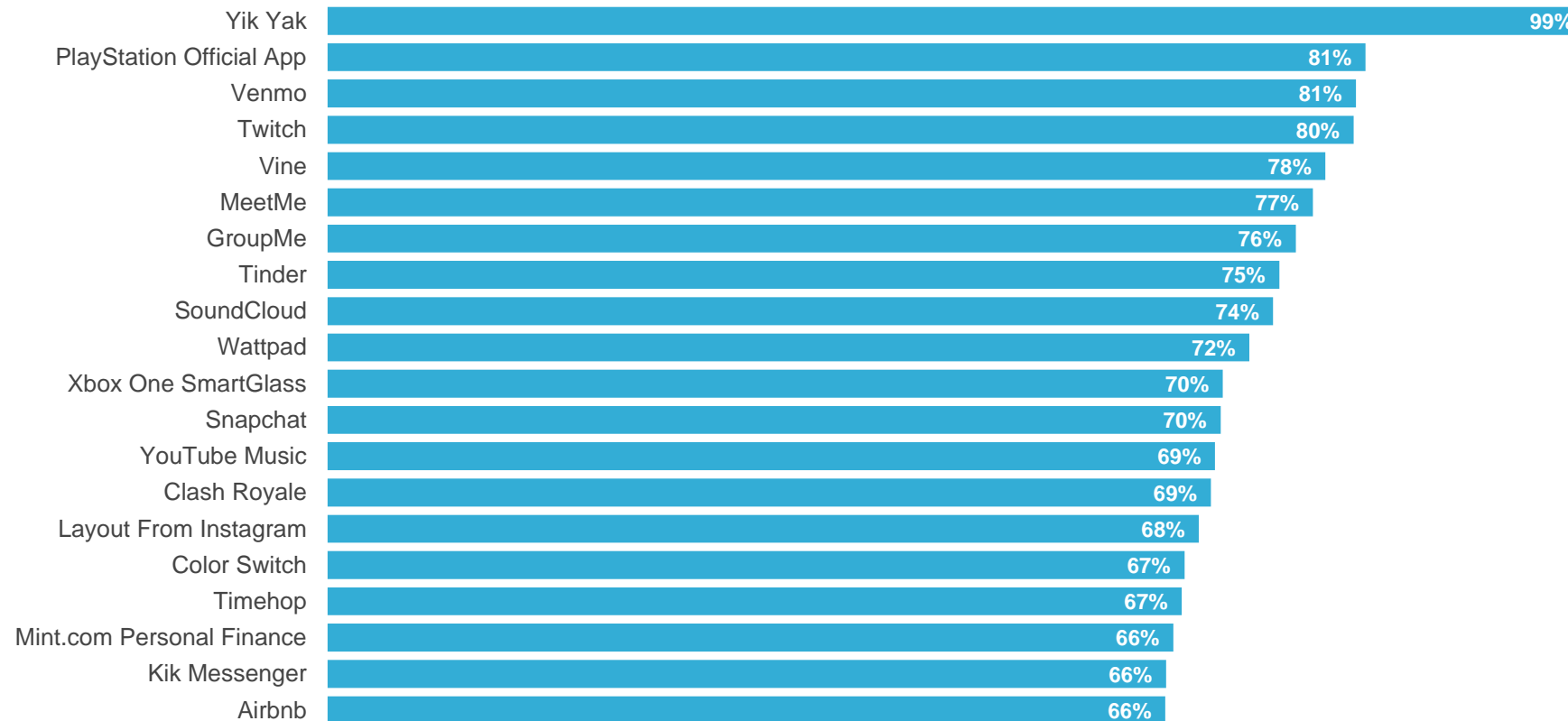
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Half of Millennials' total engagement on mobile apps occurs on the group's Top 10 highest usage apps. This concentration of activity within the Top 10 apps decreases with age, highlighting the greater consensus among younger users on their favorite apps to spend time with.

The top Millennial-skewing apps feature social or entertainment content and feature many of the hottest names in apps today.

Top 20 Apps* with Highest Concentration of Millennials (Age 18-34)

Source: comScore Mobile Metrix, U.S., Age 18+, June 2016



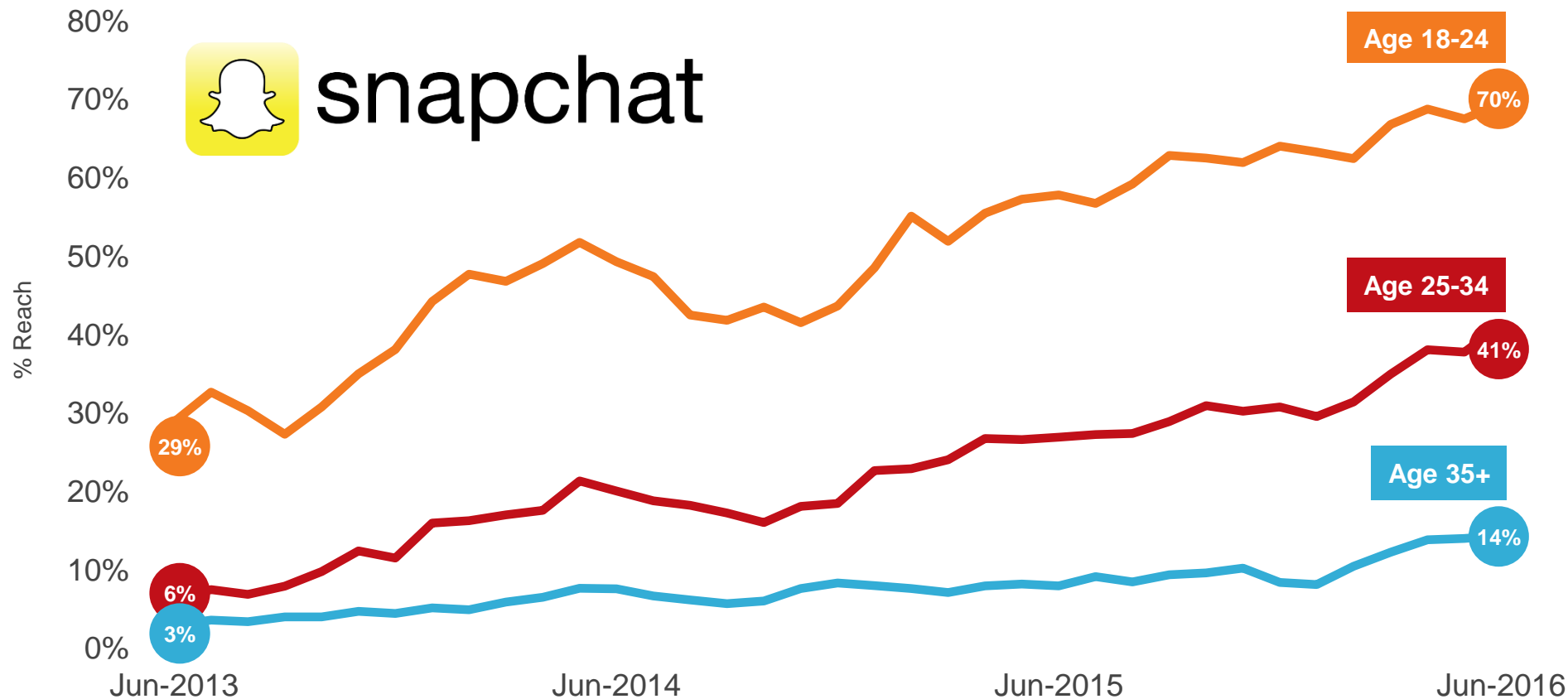
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Social apps like Yik Yak, Vine, Snapchat and Timehop skew heavily toward Millennials, as do entertainment apps like Playstation, Twitch, Xbox One Smartglass, SoundCloud and YouTube Music. Other hot names in the market today include Venmo, Tinder and Airbnb.

Snapchat is growing across age groups, and while it boasts high reach among Millennials, it's also breaking into the mainstream.

Snapchat Smartphone App Penetration by Age

Source: comScore Mobile Metrix, U.S., Age 18+



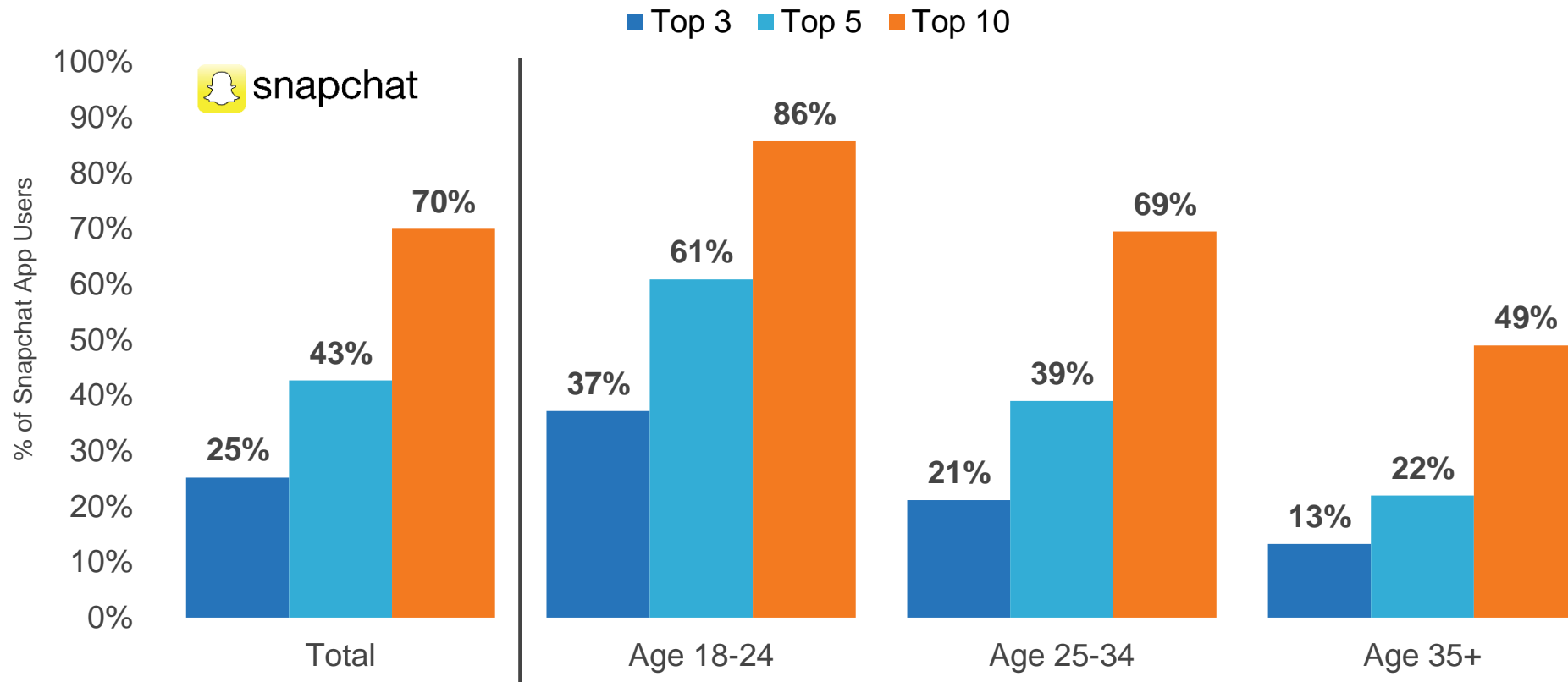
INSIGHT

Snapchat's core audience of 18-to-24 year-olds is nearing full saturation, but going forward, much of the growth should come from older 25-34 year-old Millennials, where there's still a huge opportunity. Perhaps most interestingly, the 35+ segment is now approaching a critical mass of users as it nears 15% penetration.

Snapchat ranks as a Top 3 smartphone app by usage time among 25% of its user base, and ranks in the Top 10 by 70%.

Snapchat's Rank in App Usage Among its Smartphone App Users

Source: comScore Custom Analytics, U.S., Age 18+, June 2016



INSIGHT

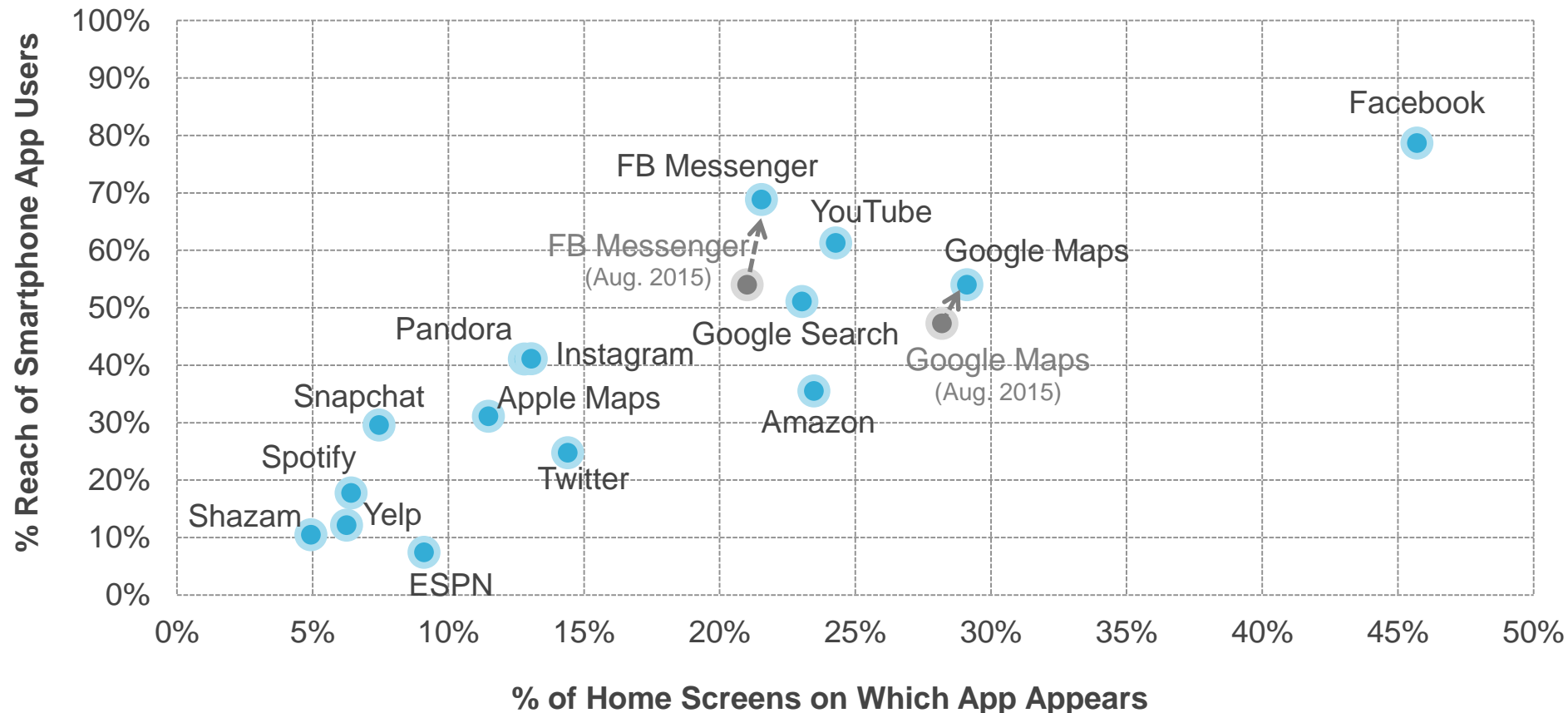
Snapchat has become a primary obsession among many of its users, ranking as one of the three most used apps for ¼ of its users and even higher among 18-24 year-olds. Cracking into this rarified air is an impressive feat considering well-entrenched positions of high engagement apps like Facebook, Pandora, YouTube and Instagram.

There's a strong correlation between home screen position and how often an app gets used, with Facebook leading on both accounts.

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Selected Smartphone Apps: Visitor Penetration vs. % Home Screen Incidence

Source: comScore Custom Survey, U.S., Age 18+, August 2016; comScore Mobile Metrix, U.S., Age 18+, June 2016

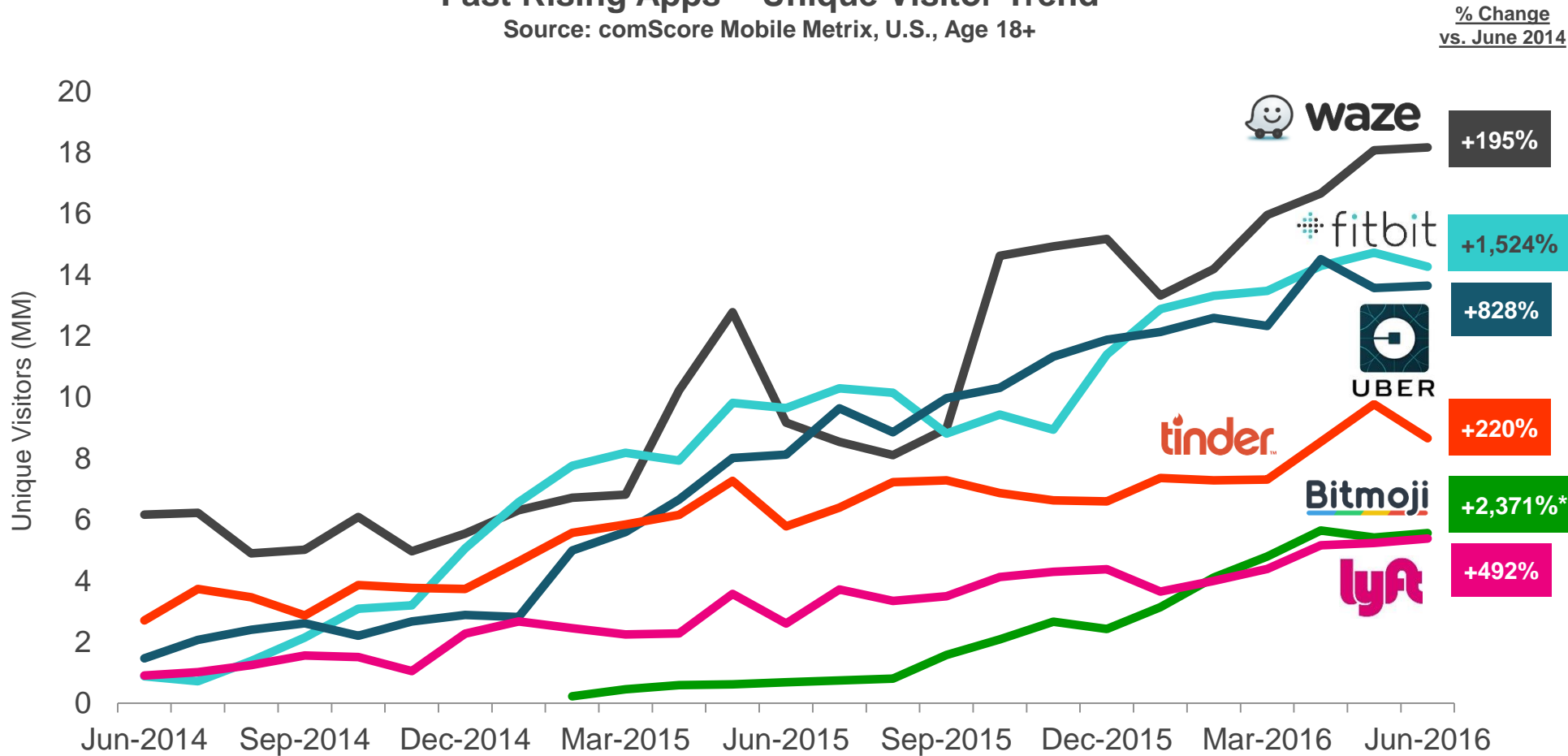


Apps with easy access and visibility on the home screen unsurprisingly attract more visitors than apps that rarely obtain home screen real estate. Facebook Messenger and Google Maps each saw annual gains in their placement on home screens, which coincided with strong growth in audience reach.

Many of the fastest growing apps are services that improve existing real-world behaviors, such as hailing cabs, exercising and dating.

Fast Rising Apps – Unique Visitor Trend

Source: comScore Mobile Metrix, U.S., Age 18+

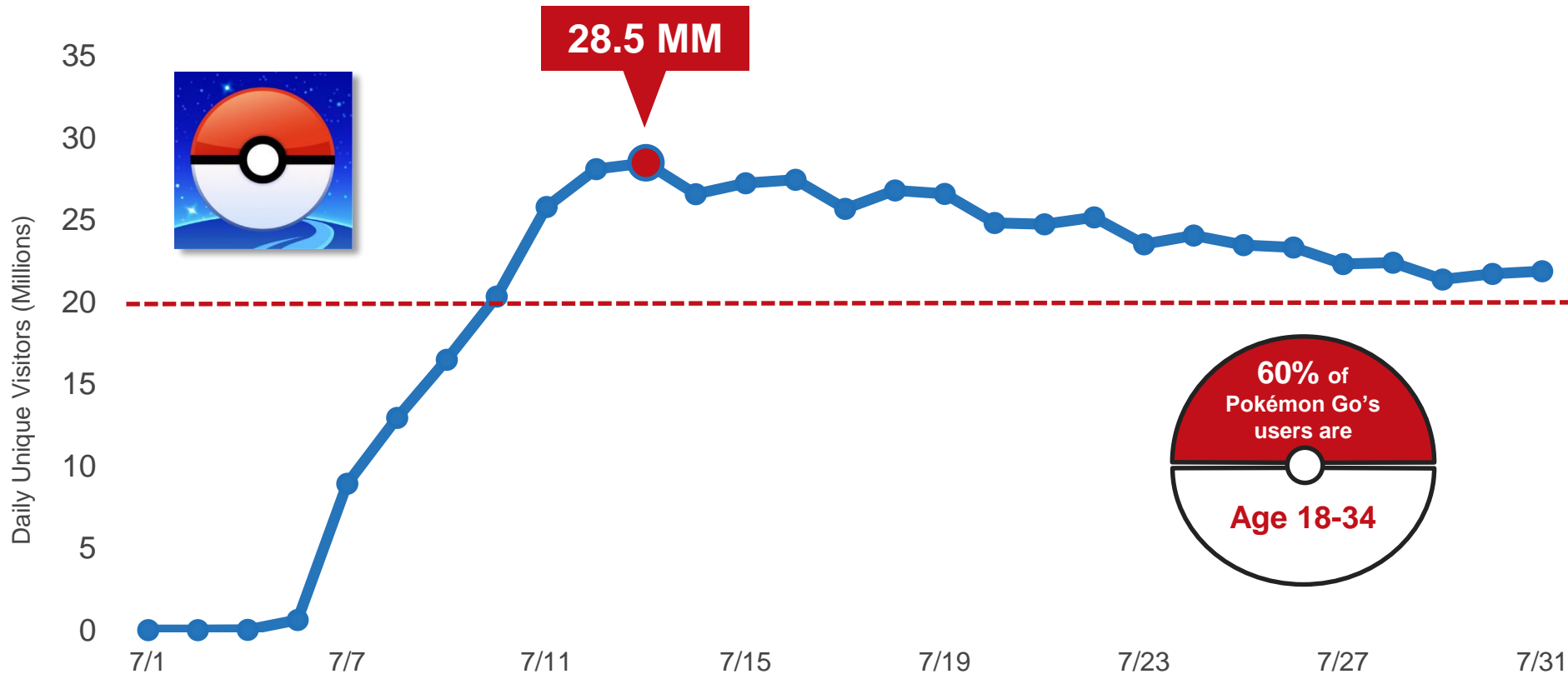


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Waze helps you navigate through traffic more efficiently, Uber and Lyft improve the process of hailing a cab, Tinder makes dating easier and Fitbit lets you to track your personal fitness metrics. Bitmoji, on the other hand, capitalizes on a newer digital behavior, enabling users to create personal cartoon avatars of themselves for more expressive communication.

Pokémon GO – a location-based augmented reality game – is the latest mobile app phenomenon, exploding onto the scene in July.

Pokémon GO: Daily Unique Visitor Trend
Source: comScore Custom Analytics, U.S., Age 18+, July 2016



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Pokémon GO launched on July 6th, and in just a matter of days it was consistently capturing more than 20 million daily users. Throughout the rest of the month, Pokémon GO never dipped below that mark, and it peaked with 28.5 million daily users on July 13th.



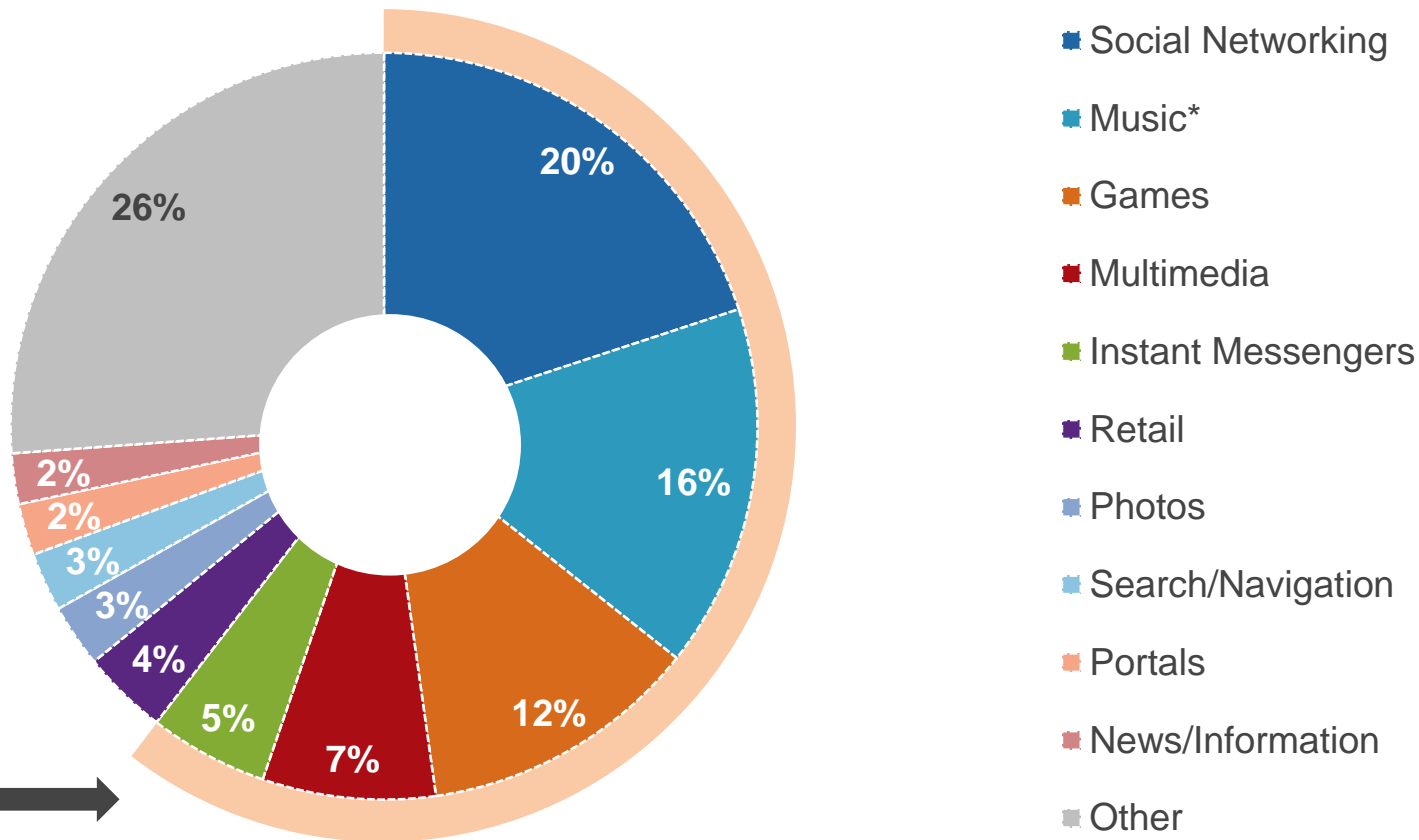
Content Categories



Social and entertainment content dominate mobile app engagement, representing the Top 5 categories and 60% of time spent on apps.

Share of Mobile App Time Spent by Content Category

Source: comScore Mobile Metrix, U.S., Age 18+, June 2016



Indicates entertainment and communication categories.

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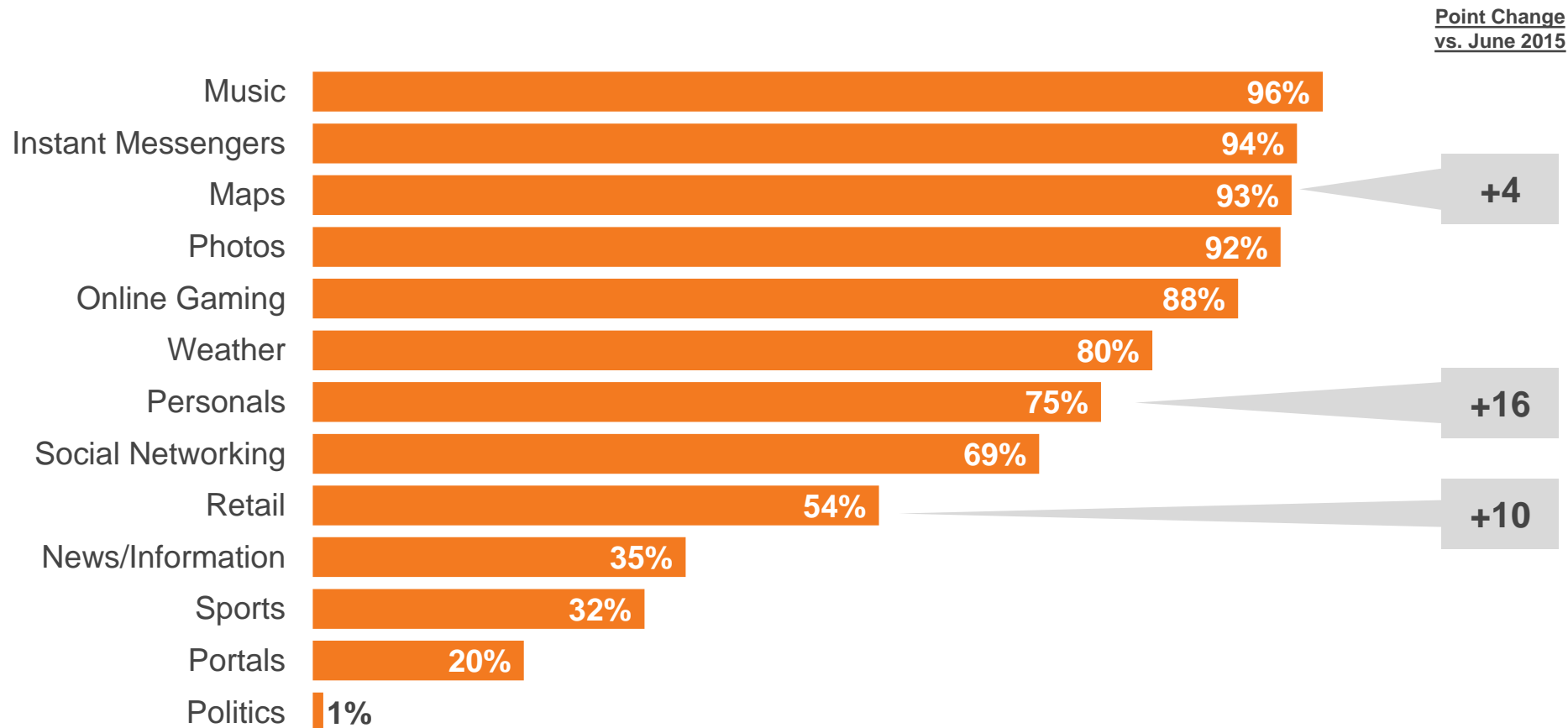
Social Networking, Music and Games contribute nearly half of total time spent on mobile apps. The strength of the top categories highlights that mobile devices are more heavily used for entertainment and communication than their desktop counterparts.

Certain content categories' usage is now driven almost exclusively by apps, with Music and Instant Messengers leading the way.

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Mobile App Share of Total Digital Time Spent for Selected Content Categories

Source: comScore Media Metrix Multi-Platform & Mobile Metrix, U.S., Total Audience, June 2016

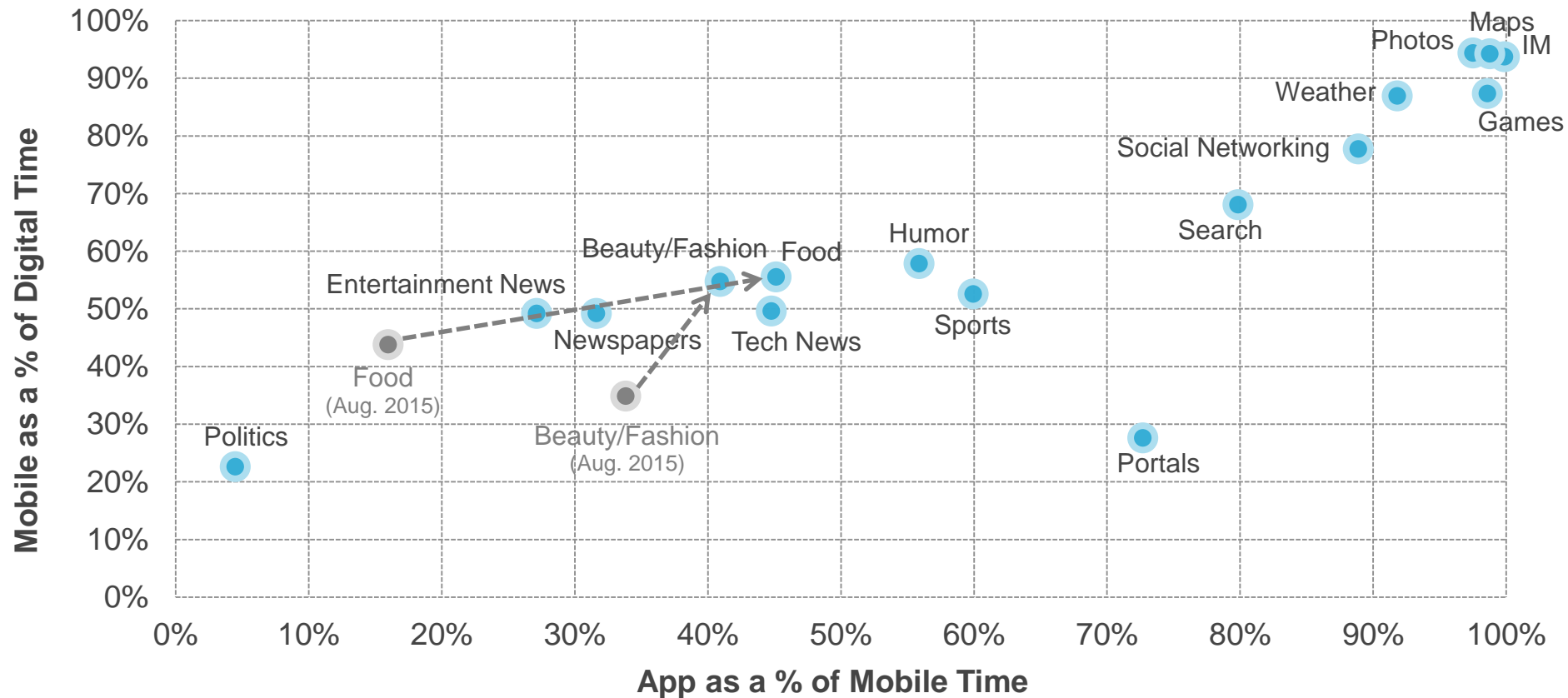


Mobile Apps dominate total time spent for social and communication categories, as well as certain on-the-go utilities like Music, Maps and Weather. The growth of apps like Tinder in Personals and Amazon in Retail contributed to the double-digit gains in mobile app share for their respective categories.

Mobile usage lives and dies by the success of apps. Categories with strong app usage are more likely to shift from desktop to mobile.

Selected Content Category Share of Time Spent on Mobile & Apps

Source: comScore Media Metrix Multi-Platform & Mobile Metrix, U.S., Total Audience, June 2016



INSIGHT

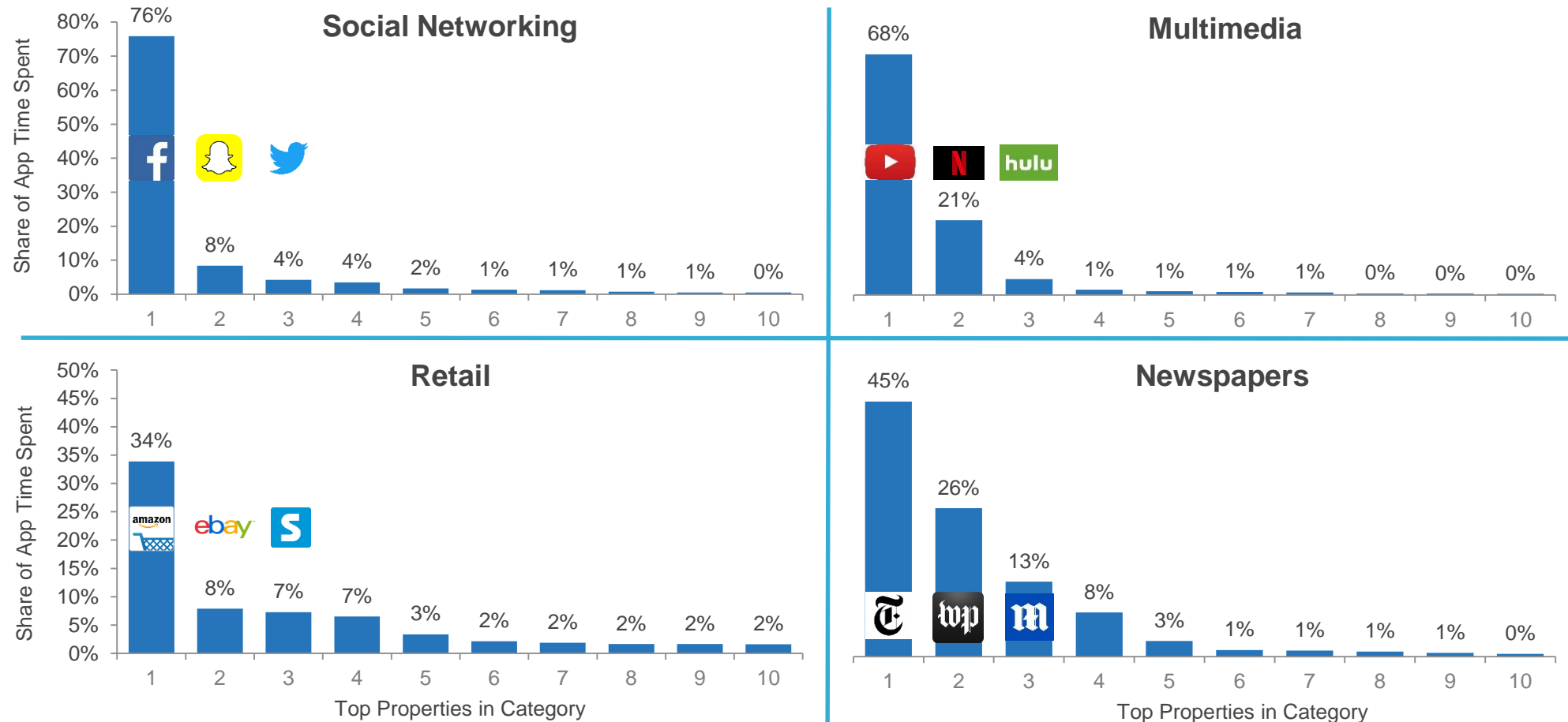
It remains true that without strong apps, categories are not navigating the overall transition to mobile as effectively. Lifestyle categories such as Food and Beauty/Fashion saw some notable engagement shifts to mobile, driven by an increase in their share of app usage.

App usage by category tends to follow a power law distribution, featuring one strong leader, a few secondary players, and a long tail.

Concentration of Time Spent in Top Apps by Category

Source: comScore Mobile Metrix, U.S., Age 18+, June 2016

INSIGHT



Many mobile app categories follow a power law distribution, with a few entities dominating usage time, followed by a long tail. Most users only make room for a few apps in each category on their phones, making it difficult for less established brands to break through.



Summary & Key Findings



Key Takeaways

- 1 **More time is being spent on smartphone apps, but most of that time is concentrated in the highest engagement apps owned by a few of the largest internet companies.**

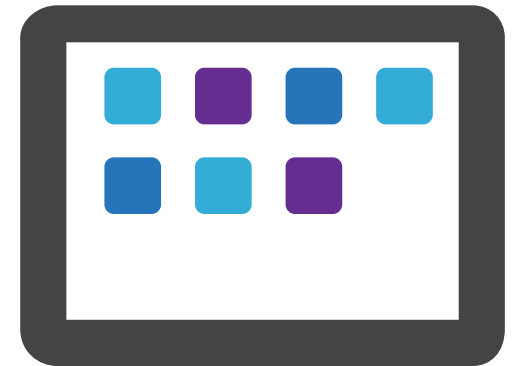
The smartphone app now accounts for half of digital media time spent and is still growing strongly, but not at the rate it once was. And large internet companies command the majority of app time, so it can be a challenging market for lesser-known brands.

- 2 **While we haven't yet reached 'Peak App' the market is definitely tightening, and app publishers need to rethink how to break through to the consumer's screen.**

People aren't downloading as many apps anymore, they increasingly put those apps into folders, and they are less likely to allow push notifications, making it harder than ever for apps to be seen. Breaking through means having the rare novel app idea or relying on traditional marketing and advertising for distribution.

- 3 **Digital publishers must have a well-developed platform strategy for converting their large mobile web audiences into highly engaged, loyal app users.**

Mobile web is the primary vehicle for expanding audience reach, but apps are where heavy engagement happens. Publishers must get better at onboarding mobile web visitors to the app, and get their apps promoted to the home screen if they want to maximize usage.





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