comscore

2019 REPORT

Global State of Mobile

This report examines trends in mobile audience behavior across key markets in North America, Europe, Latin America, and Asia. Advertisers and publishers will gain insights from a closer look at up-and-coming app categories, including ride sharing, mobile ordering, gaming and online retail.

About this report

- The **2019 Global State of Mobile report** leverages data from Comscore proprietary digital audience measurement solutions. The report is based primarily on measurement from Comscore Mobile Metrix®, which captures total mobile audience behavior on browsers and apps across smartphones and tablets. This report also includes survey-based mobile data from Comscore MobiLens® and measurement from Comscore MMX® Multi-Platform.
- **When citing information from this report**, please be sure to source Comscore as listed at the bottom of each page.
- **For more information**, please contact us at **comscore.com/learnmore**

Countries included in this report

NORTH AMERICA
Canada
U.S.

EUROPE
Italy
Spain
U.K.

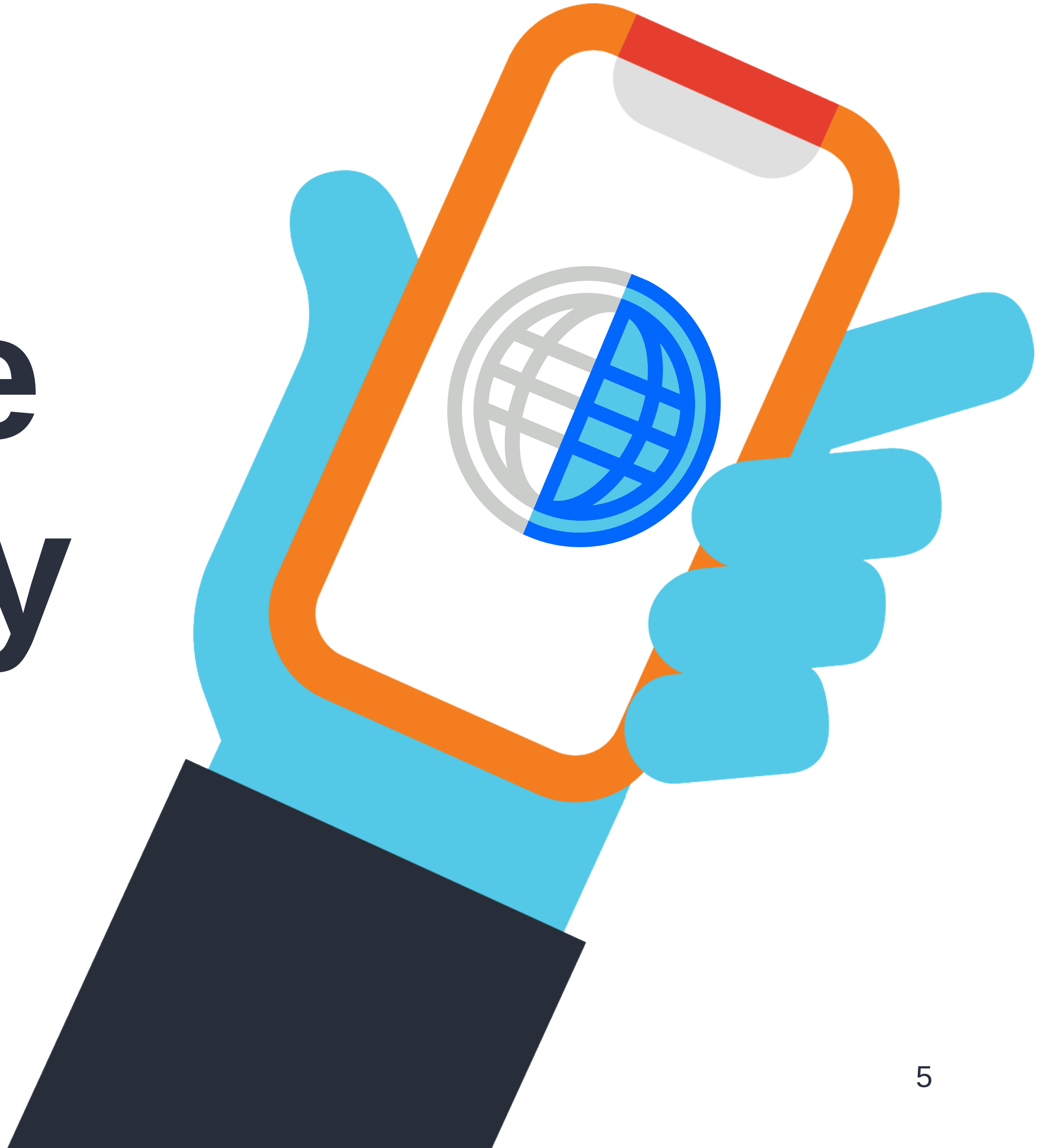
LATIN AMERICA
Argentina
Brazil
Mexico

ASIA PACIFIC
India
Indonesia

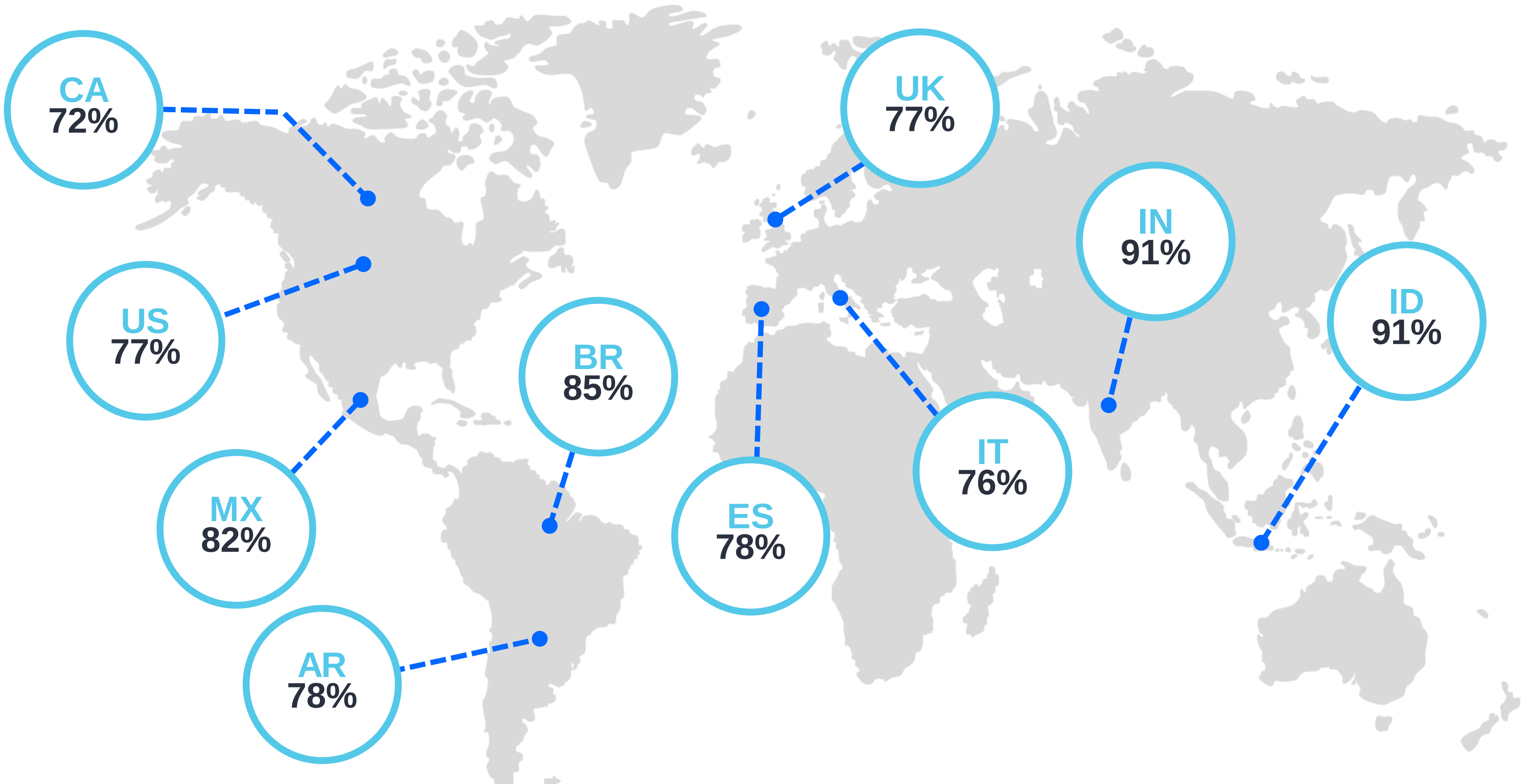
Table of Contents

1

Global mobile markets today



Global audiences are spending more time on mobile



Audiences around the world are spending more time online – and most are going to mobile. In the U.S., total minutes spent online grew 43% from June 2017 to June 2019. In Canada, we saw a 34% increase in total minutes online between June 2017 and June 2019.

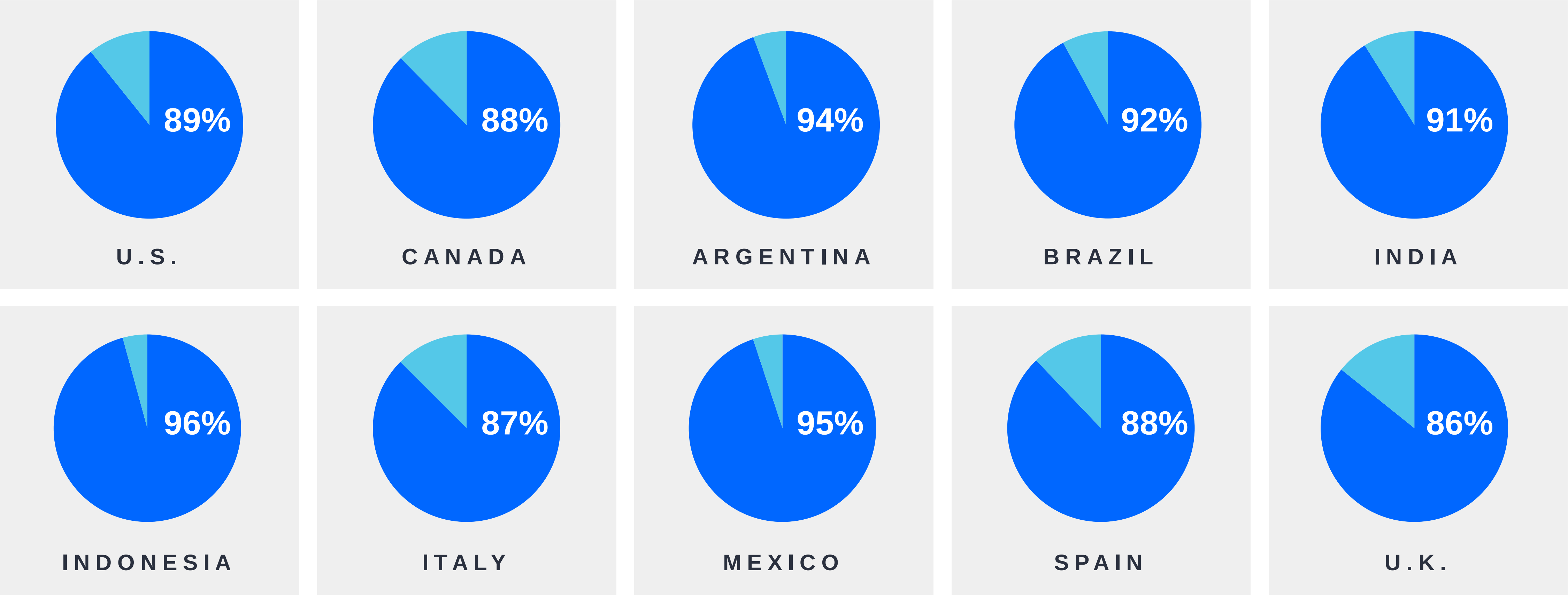
And a high percentage of these online minutes are being spent on mobile. In all countries in this report, mobile minutes as a percentage of total online minutes has been rising.

MOBILE MINUTES AS A PERCENTAGE OF TOTAL DIGITAL MINUTES, June 2019

comscore

Source: (Graphic) Comscore MMX® Multi-Platform, Total Minutes, June 2019, Multiple Countries
(Text) Comscore MMX® Multi-Platform, Total Minutes, June 2017 – June 2019, Multiple Countries

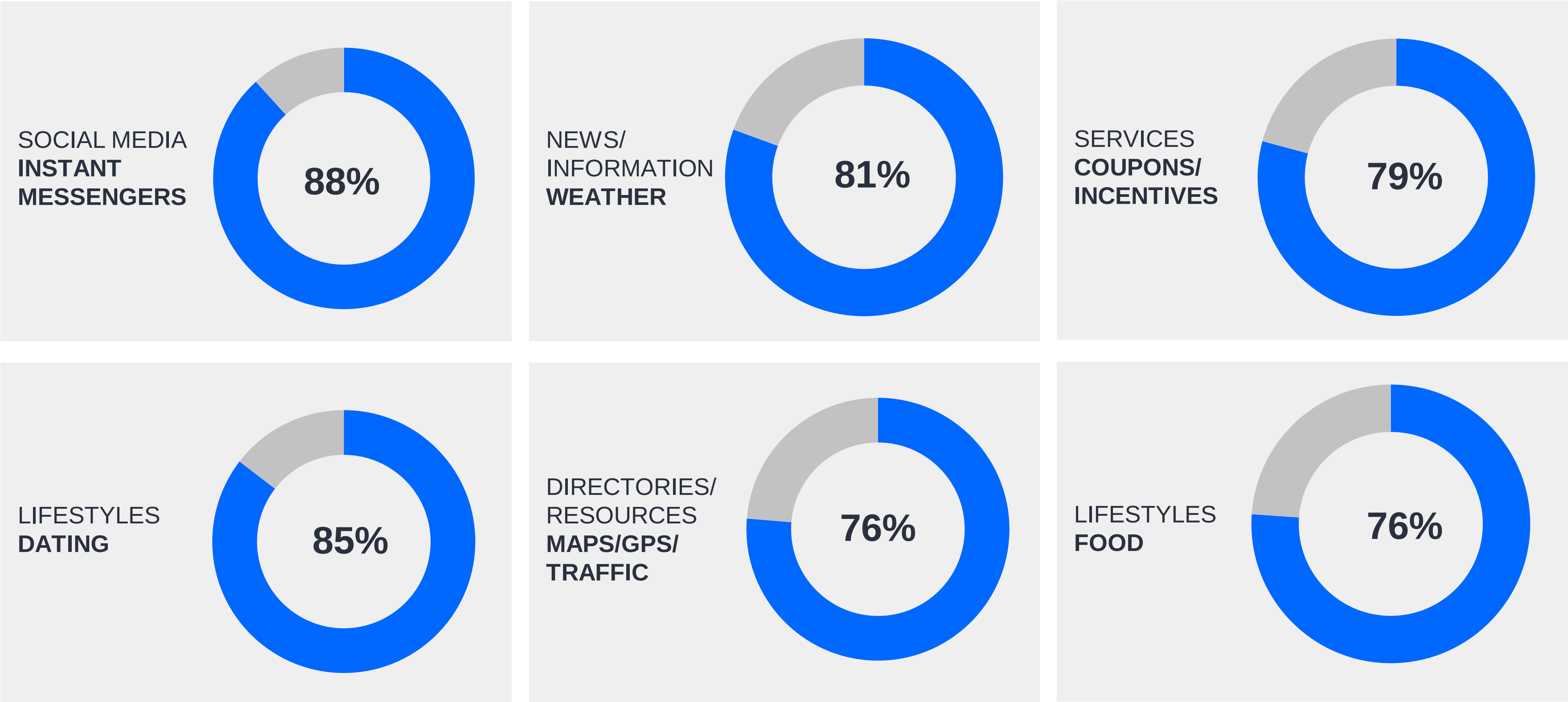
Apps drive majority of mobile minutes in all markets



MOBILE WEB MINUTES • MOBILE APP MINUTES

Source: Comscore Mobile Metrix®, Mobile web vs mobile app, Total minutes, Standard audience sets, June 2019

Certain app categories worldwide skew toward mobile-only usage

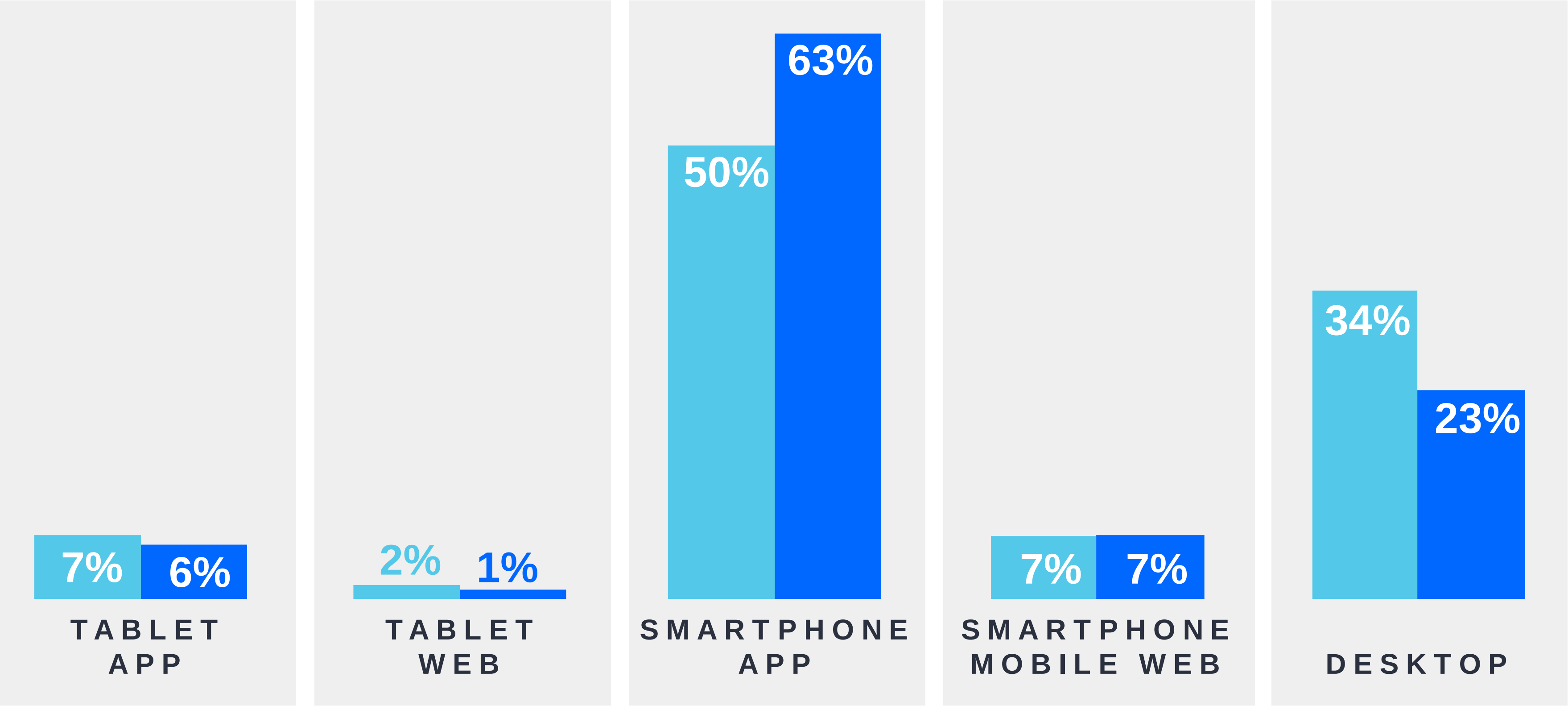


% OF TOTAL DIGITAL AUDIENCE WHO ACCESS APP CATEGORIES USING MOBILE-ONLY

Looking a layer deeper, how are global audiences engaging with their mobile devices? The previous page reveals more than 80% of mobile minutes in all markets reported are spent on apps.

At the content category level (left), we see that on-the-go categories like weather, food and instant messaging have become even more mobile concentrated across the world. In 2017, 72%, 60% and 80% of users went mobile-only to access content, but in 2019 we've seen this rise to 81%, 76% and 88%.

Mobile apps on smartphones still dominate time spent with digital media in the U.S.



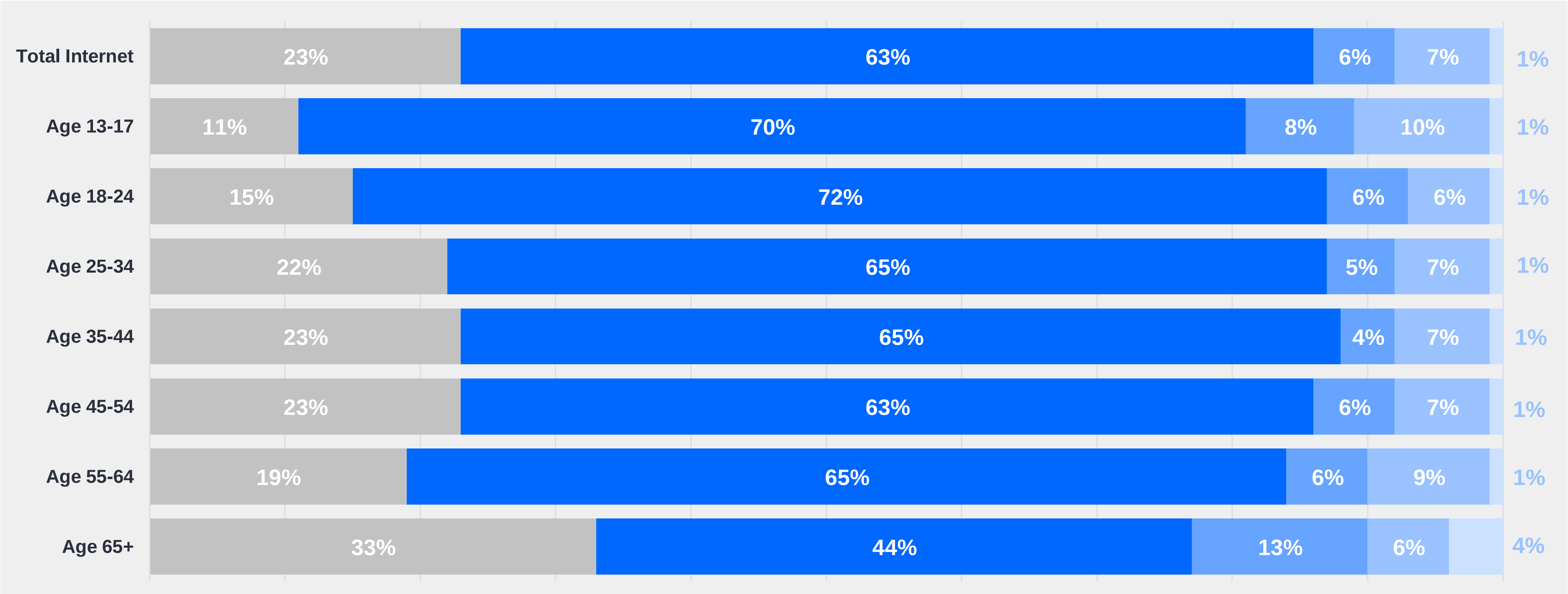
Between 2017 and 2019 in the U.S. (left), we've seen a decrease in desktop use, with a concurrent increase in mobile use that is concentrated in smartphone app use.

In the next page, we compare mobile use across age groups in the U.S., to find that there is strong and relatively even penetration across all cohorts. Users 65 or older noticeably tend to spend more online time in tablet apps than any other age cohort – possibly because of larger screen real estate.

DIGITAL MEDIA USAGE (% MINUTES SPENT) 2017 VS 2019

Source: Comscore MMX® Multi-Platform, Total Minutes, June 2017 & June 2019, U.S. and Comscore Media Metrix ®, Total Minutes, June 2017 & June 2019, U.S.

There is strong mobile use across U.S. generations

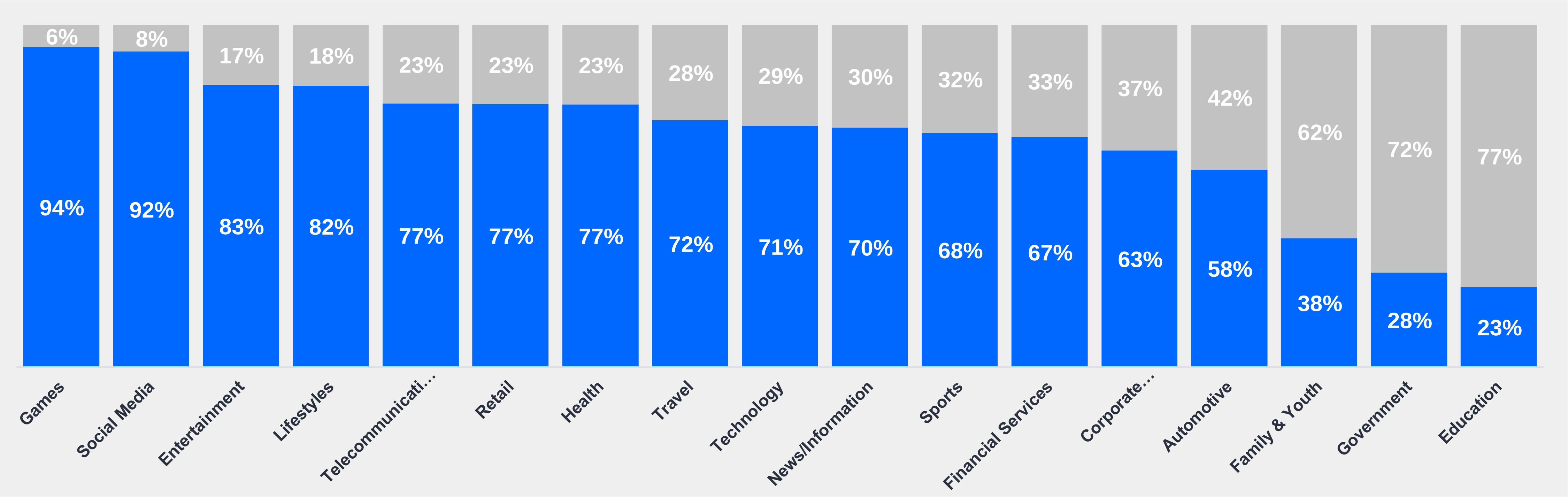


% OF TOTAL DIGITAL MINUTES: DESKTOP • SMARTPHONE APP • TABLET APP • SMARTPHONE WEB • TABLET WEB

Source: Comscore MMX® Multi-Platform & Mobile Metrix Web & App, Total Minutes, June 2019, U.S.

Share of mobile time spent is reaching historic levels in the U.S. in key categories

Games, Social Media and Entertainment are now mobile-first consumption categories in the U.S. The popularity of casual, easy to play games has opened up the games category to users beyond those playing on consoles and PCs, to more age groups. A constant churn of trendy new games being released create novel gameplay experiences, aligning very well with how consumers like to spend their time in today's fast paced world.



SHARE OF TOTAL MINUTES: MOBILE MINUTES • DESKTOP MINUTES

2

CATEGORY DEEP DIVES

Mobile Gaming

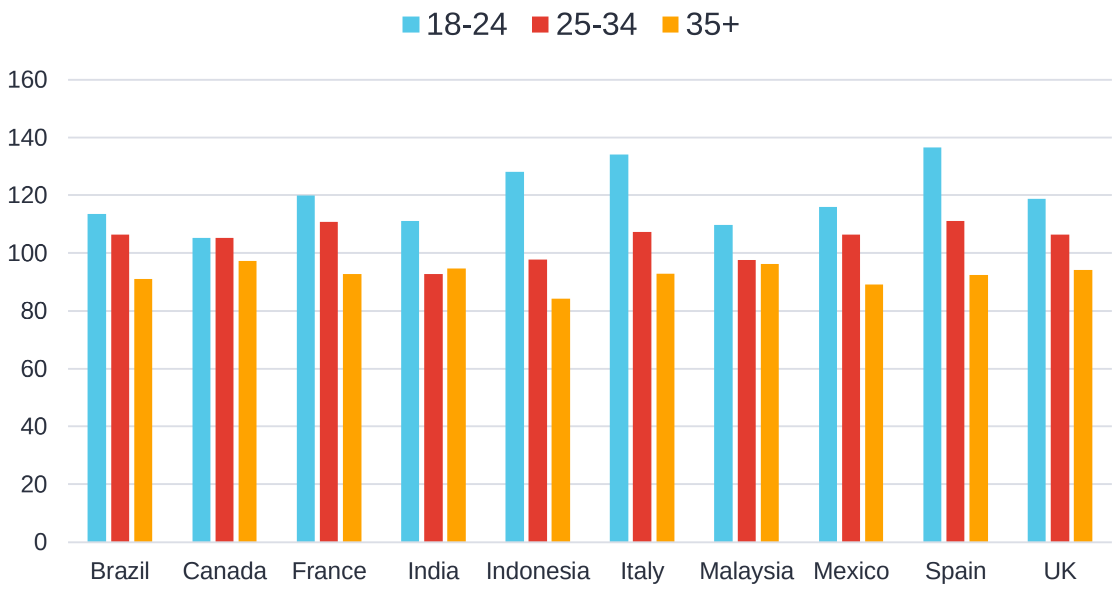
Adoption of gaming apps around the world

BY AGE GROUP

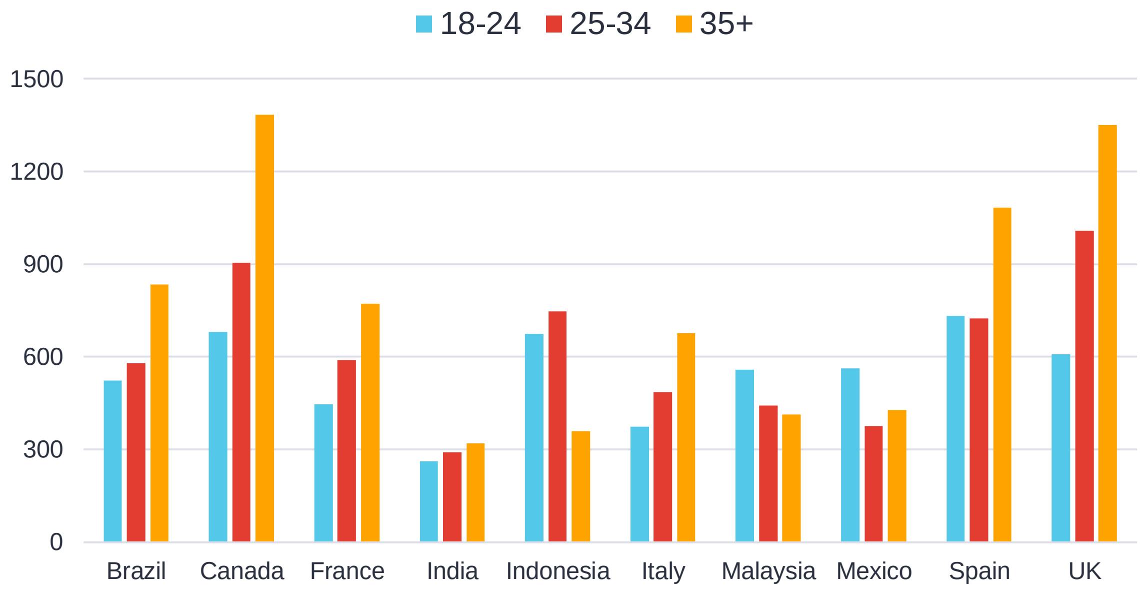
Mobile gaming apps tend to attract younger audiences. More precisely, the proportion of younger consumers is higher on gaming apps than it is on the average website for a given country, as the chart below shows. Conversely, the proportion of consumers in the 35+ age bracket is lower there than it is on the average website.

However, in all countries except Indonesia, Malaysia, and Mexico, **older audiences tend to spend more time on gaming apps**. This pattern is particularly striking in Canada, Spain, and the UK.

DEMOGRAPHIC COMPOSITION INDEX BY AGE GROUP



MINUTES PER VISITOR, BY AGE GROUP



comscore

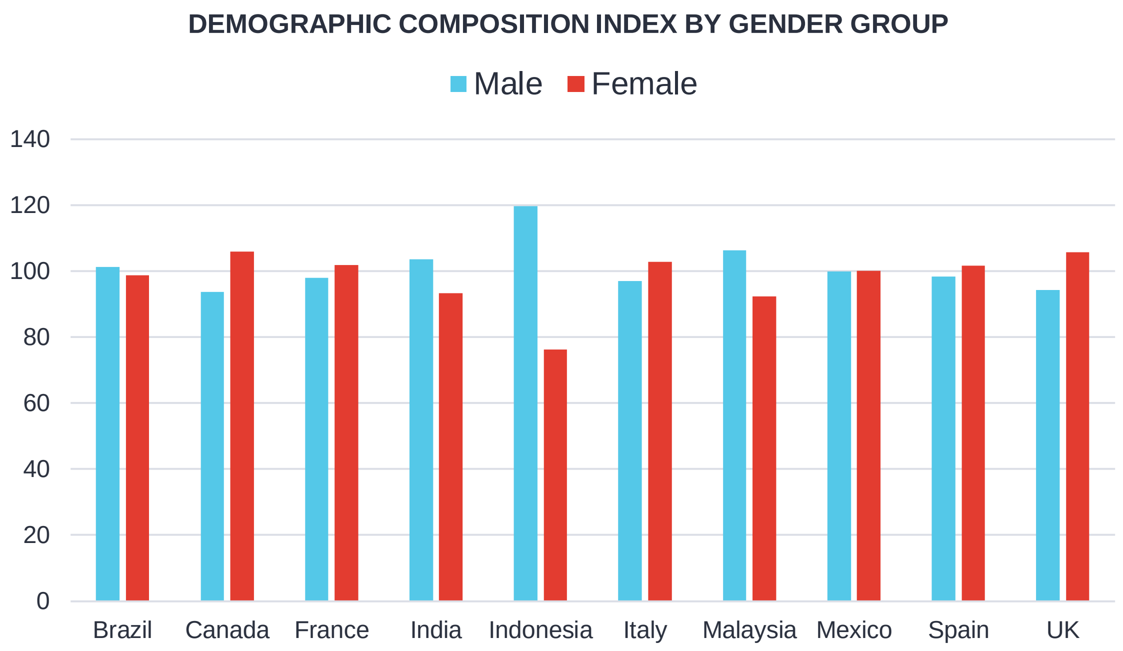
Source: Comscore Mobile Metrix, September 2019, Brazil, Canada, France, Indonesia, Malaysia, Mexico, Spain and UK.

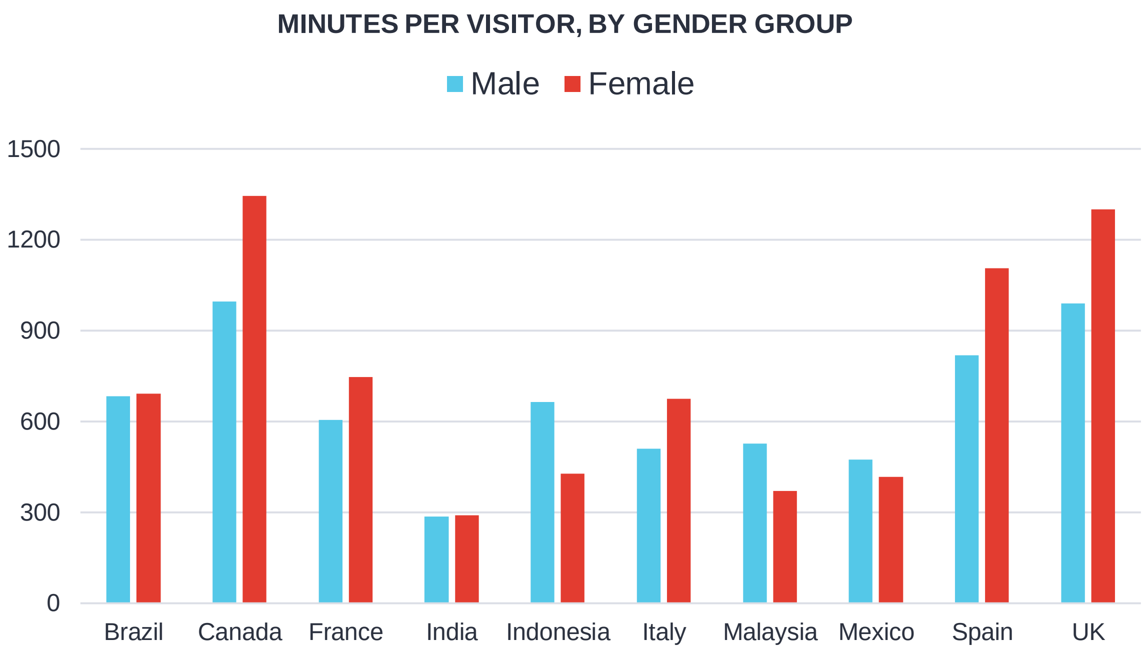
Adoption of gaming apps around the world

BY GENDER GROUP

Overall, **women are enthusiastic adopters of mobile gaming.** In most countries except Brazil, India, Indonesia, and Malaysia, the proportion of women is higher on gaming apps than it is on the average website for any given country, as the chart below shows. Conversely, the proportion of men is lower there than it is on the average website.

Moreover, in all countries except India, Indonesia, Malaysia, and Mexico, **women spent far more time on gaming apps then men.** For marketers, this is a clear indication that there are opportunities beyond the stereotypical young and male audience.





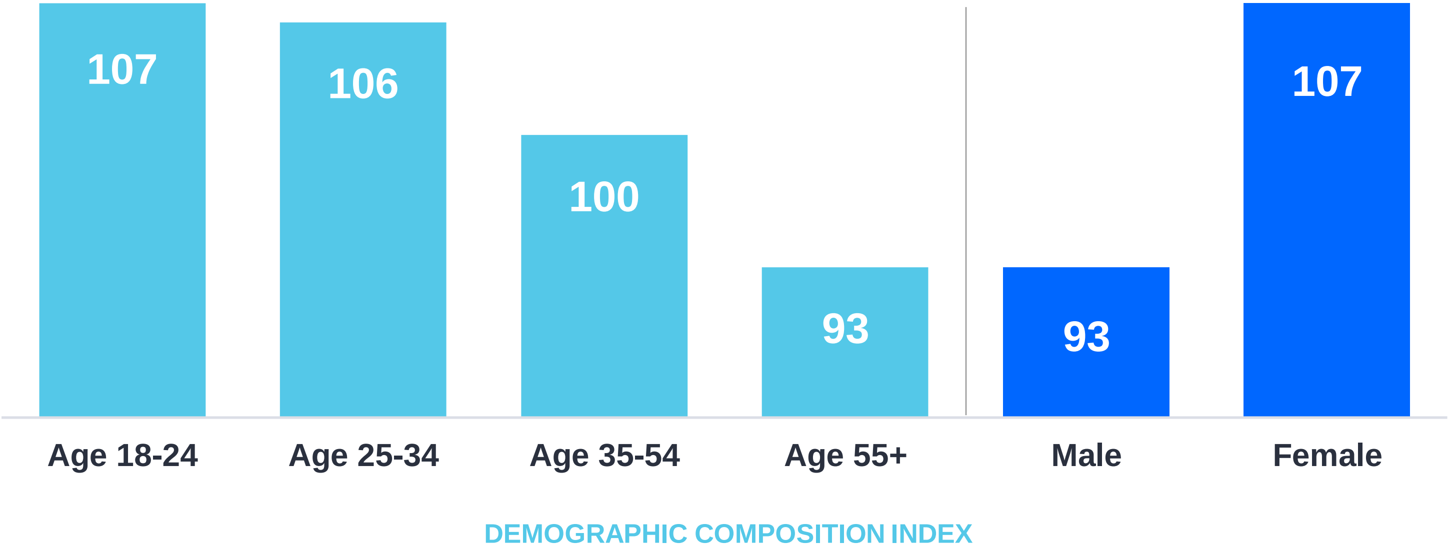
Source: Comscore Mobile Metrix, September 2019, Brazil, Canada, France, Indonesia, Malaysia, Mexico, Spain and UK.

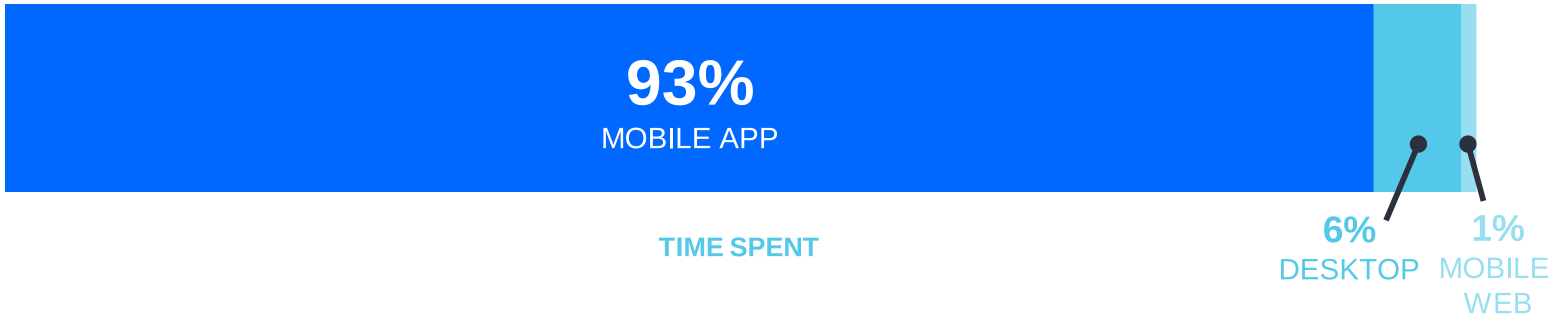
Gaming apps in the U.S.

In the U.S., mobile games reach 80% of the total app audience, an increase of 19% from June 2017. Users likely to be playing mobile games on the whole skew young and female – but more on this in the next pages.

Looking at top ranked apps by age cohort in the U.S. (next page), we see that younger players are drawn to Augmented Reality (AR) experiences like Pokemon Go and Harry Potter Unite, and multiplayer battle games like Clash of Clans, while older audiences opt to spend time in more easy going games like Word with Friends 2 and Candy Crush.

Overall, growth in mobile games is strong and ongoing (page 15), and represents a tremendous opportunity for game publishers and advertisers to reach engaged audiences at scale.





Source: Comscore MMX® Multi-Platform & Mobile Metrix®, Mobile App Only, Games Category, June 2019 & June 2017, U.S.

Top mobile games by total unique visitors in the U.S.

PERSONS:18-24

1. Pokémon Go
2. Wordscapes
3. BitLife
4. Clash of Clans
5. aquapark.io

PERSONS: 25-34

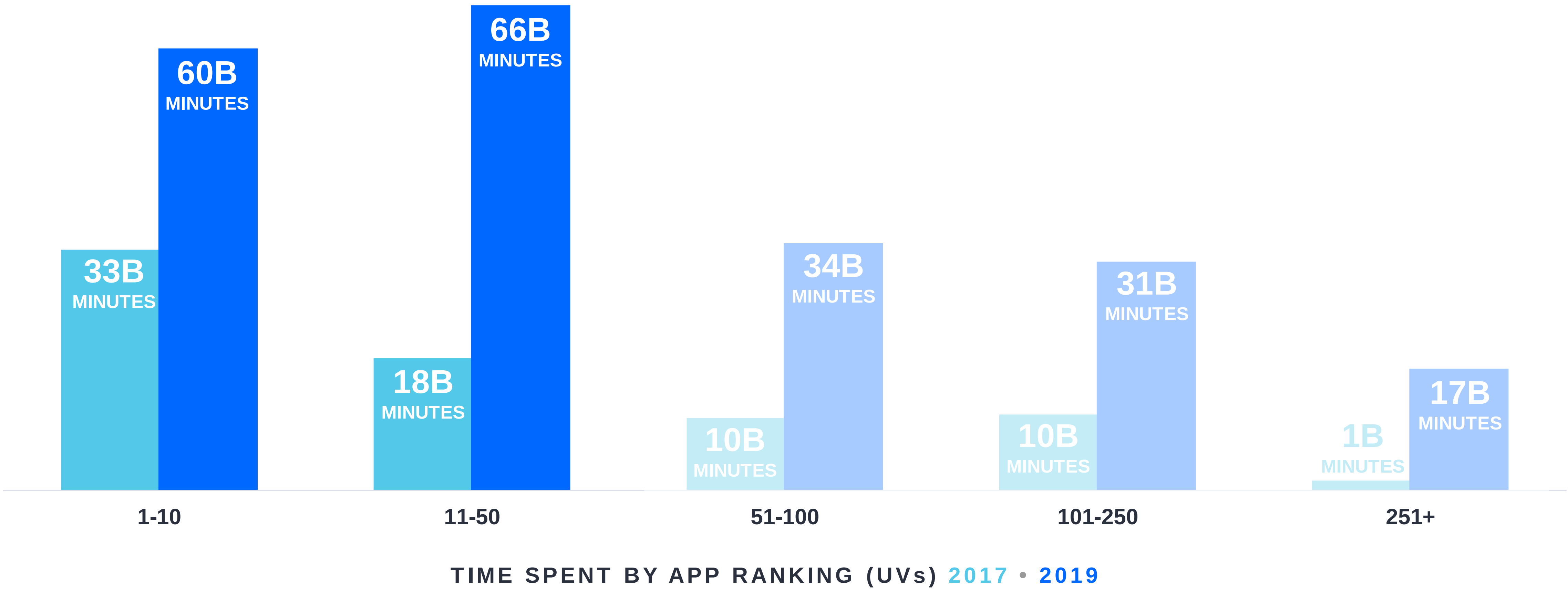
1. Pokémon Go
2. Harry Potter Wizards Unite
3. Words with Friends 2
4. Homescapes
5. Wordscapes

PERSONS: 35+

1. Words with Friends 2
2. Wordscapes
3. Candy Crush Saga
4. Toon Blast
5. Yahtzee with Buddies

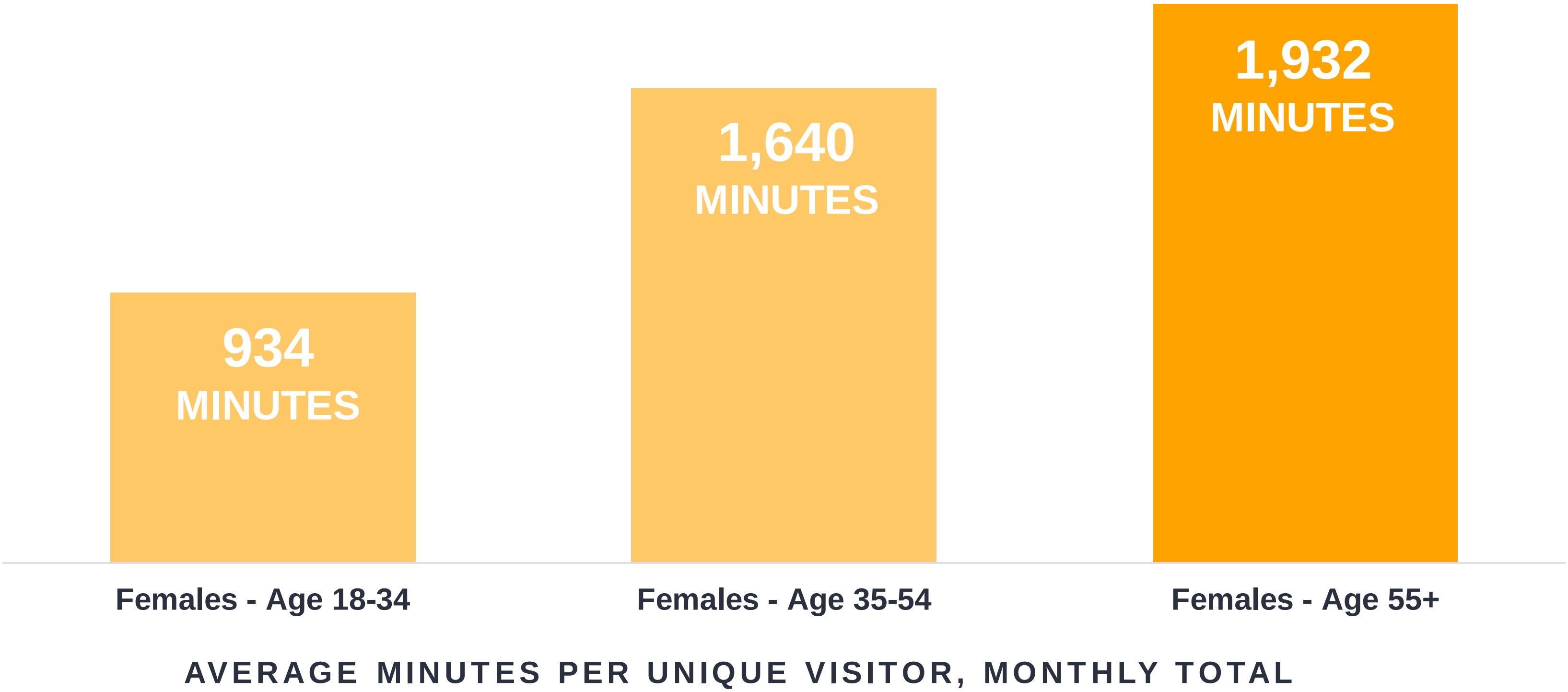
Source: Comscore Mobile Metrix®, Mobile App Only, Games Category, June 2019, U.S.

In the U.S., time spent in all games has grown; time spent has doubled in top 10 games



Mobile Metrix®, Mobile App Only, Games Category, June 2017 & June 2019, U.S.

In the U.S., females 55+ spend more time per user playing mobile games than other female age groups



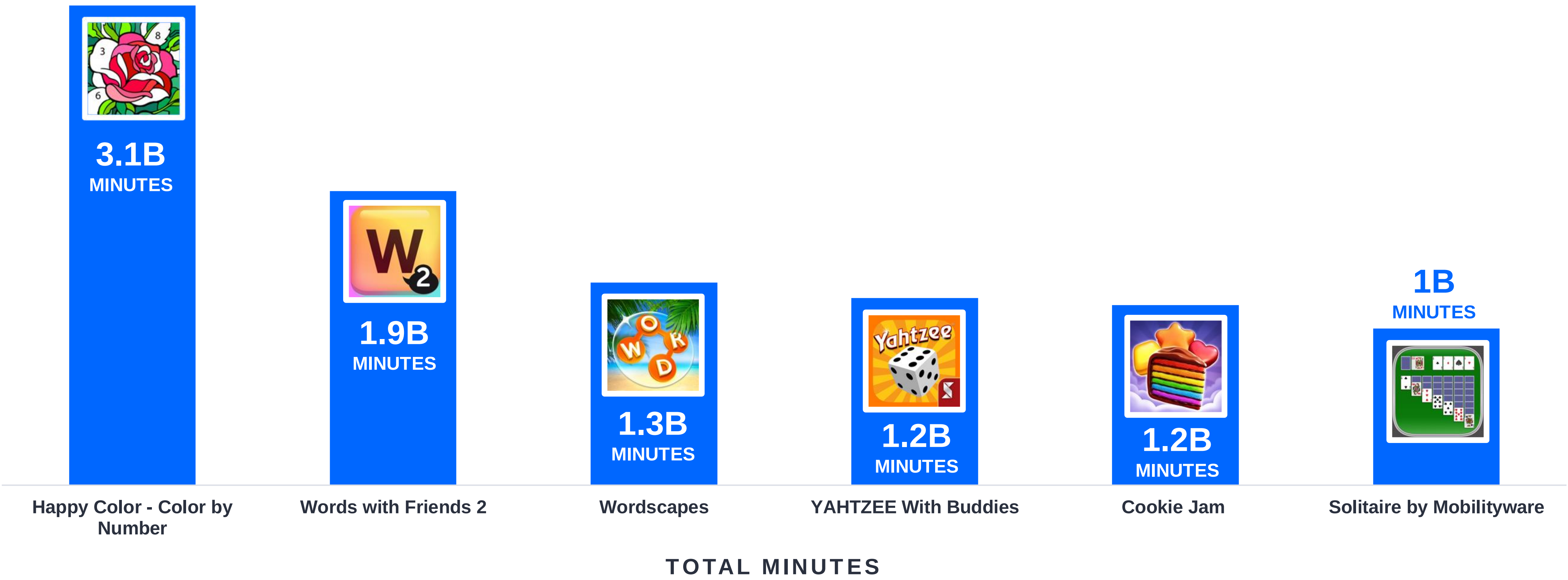
In the U.S., females 55+ spend more time per user playing mobile games than all other female age groups. Surprised? We were too.

In the next page, we see they spend the most time on more casual games that are easy to start and easy to learn, including apps like Happy Color, Words with Friends 2, Wordscapes and the always popular Solitaire.

Younger demographics aren't the only ones gaming on mobile today, and easy-going, casual games may provide brand and media marketers a great venue to get in front of a valuable cohort of users.

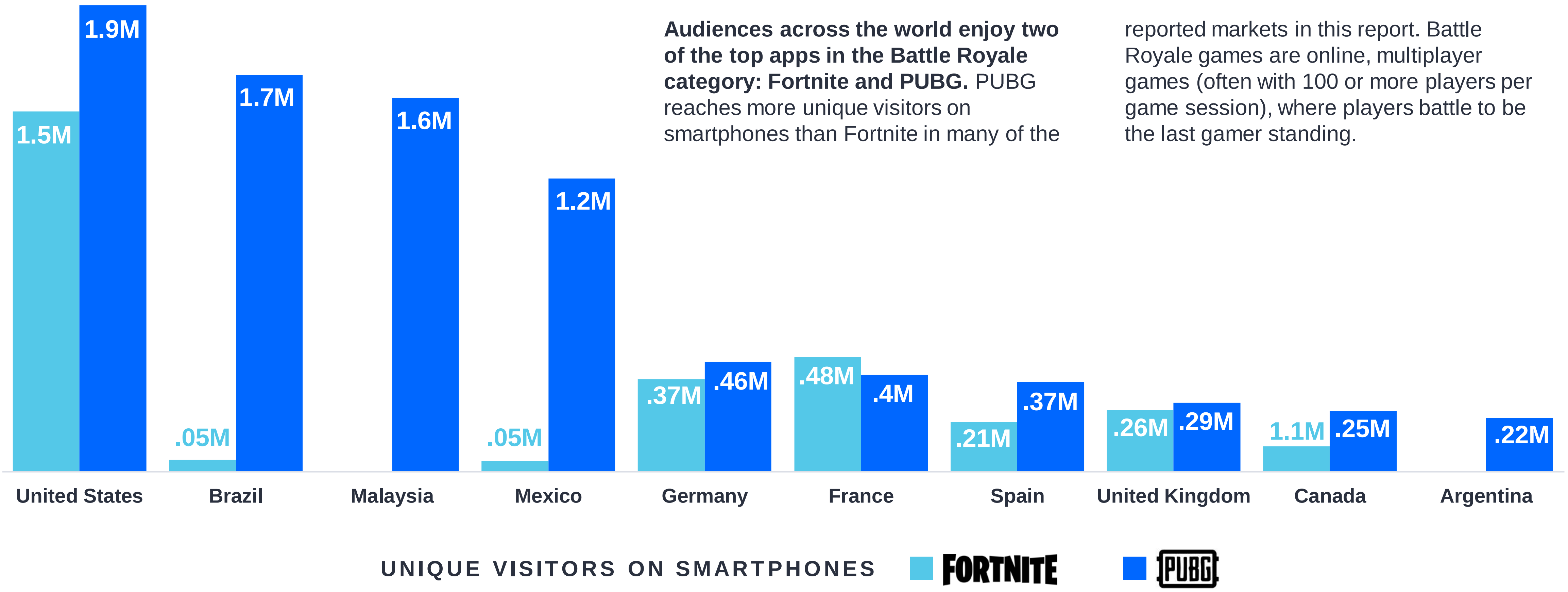
Source: Comscore Mobile Metrix®, Mobile App Only, Games Category, Average minutes per unique visitor, June 2019, U.S.

Among female players 55+ in the U.S., casual games that promote relaxation, fun and connection are top in time spent



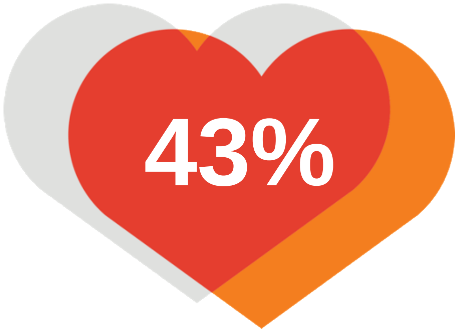
Source: Comscore Mobile Metrix®, Mobile App Only, Games, Females Age 55+, June 2019, U.S.

Battle of the Battle Royales: PUBG vs. Fortnite around the world



Audiences across the world enjoy two of the top apps in the Battle Royale category: Fortnite and PUBG. PUBG reaches more unique visitors on smartphones than Fortnite in many of the reported markets in this report. Battle Royale games are online, multiplayer games (often with 100 or more players per game session), where players battle to be the last gamer standing.

‘Freemium’ games see success in the U.S.



Had a **“very favorable”** opinion about freemium games.

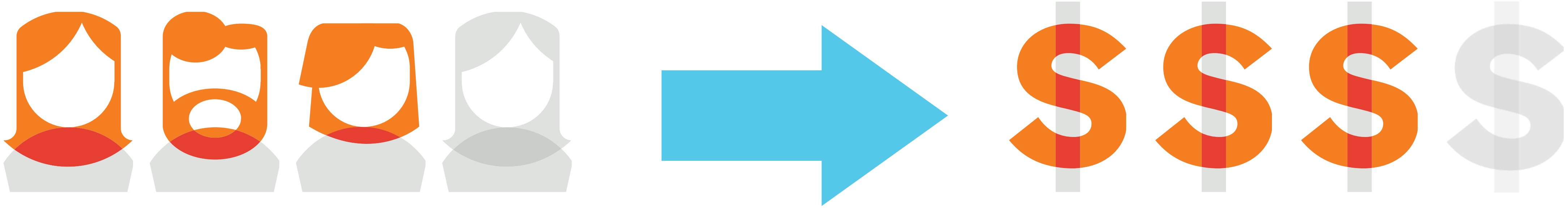
4-of-5 said “I prefer a free game in which I can **choose** when to spend real money.”

According to a recent Comscore “State of Gaming” survey (page 19-21), freemium games and rewarded advertisements resonate with U.S. audiences.

Overall, mobile games reach a massive 80% of the total app audience in the U.S., and time spent in mobile games has both significantly increased and been concentrated in the top 50 games ranked by unique visitors. Success with freemium games may help publishers and advertisers captivate audiences who are willing to spend – which is a great place for those looking to reach all audiences at scale.

Source: Comscore Custom Survey, “State of Gaming,” Age 18-65, March-April 2019, U.S.

In the U.S., in-game purchases are ubiquitous for mobile gamers



3-of-4 say they currently play **freemium** games.

73% of freemium game players have made an **in-game purchase**.

However, only **34%** agreed they “enjoy making in-game purchases.”
Most said they felt **compelled to do so, in order to remain competitive in the game.**

In the U.S., even gamers who dislike advertisements will watch ‘rewarded’ advertisements

87% of gamers that dislike ads in general say they watch **rewarded advertisements**.

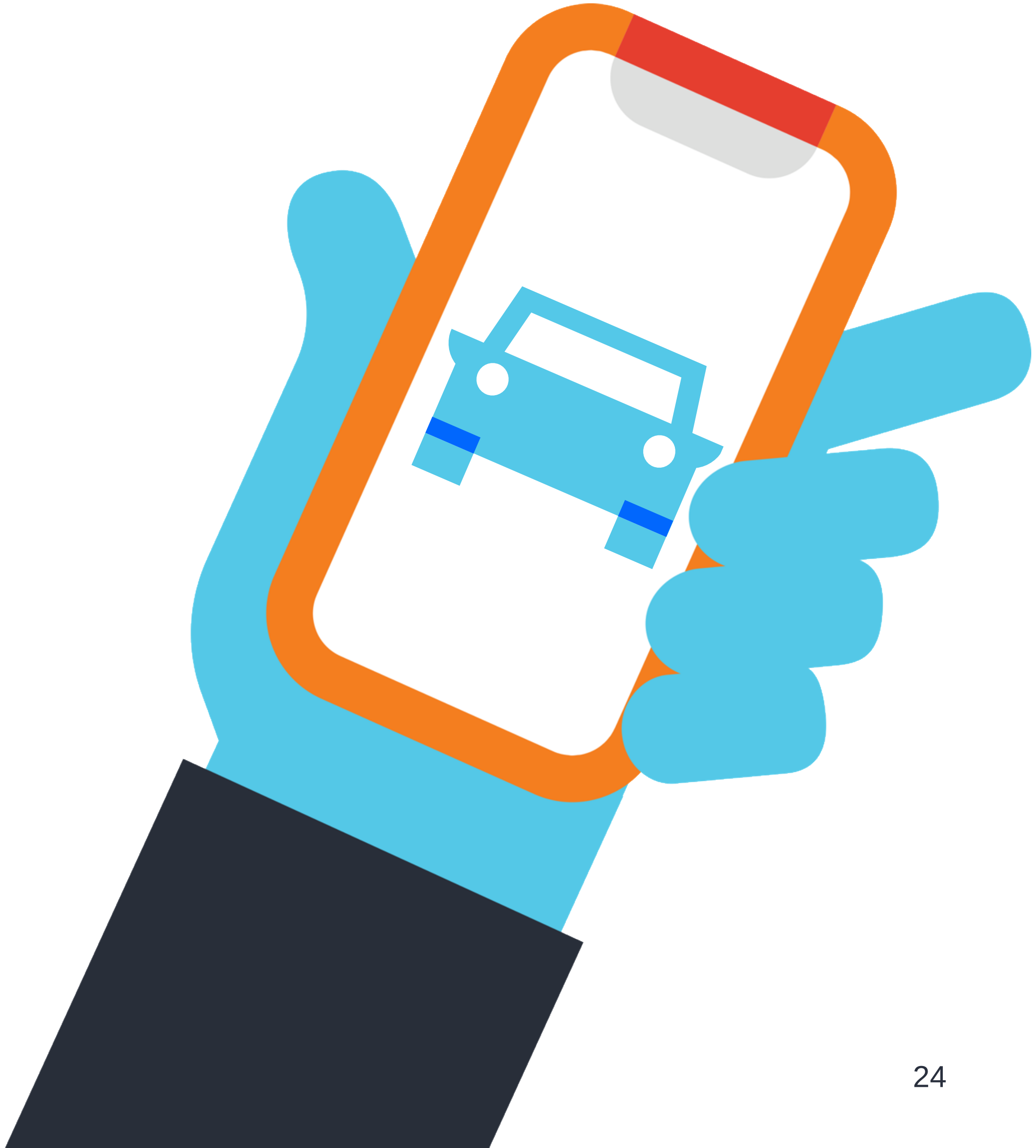
More than half say if they get a **reward** for watching an ad, they **don’t mind them**.

Learn more insights on digital gaming audiences and emerging gaming trends from [Comscore’s State of Gaming report](#).

2

CATEGORY DEEP DIVES

Ride sharing & mobility



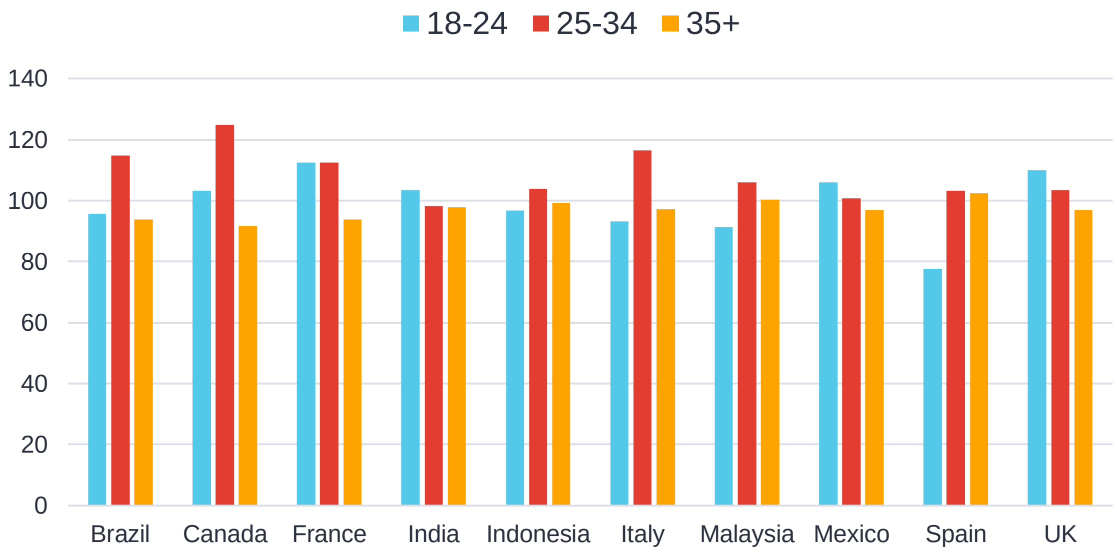
Adoption of travel apps

BY AGE AND GENDER GROUP

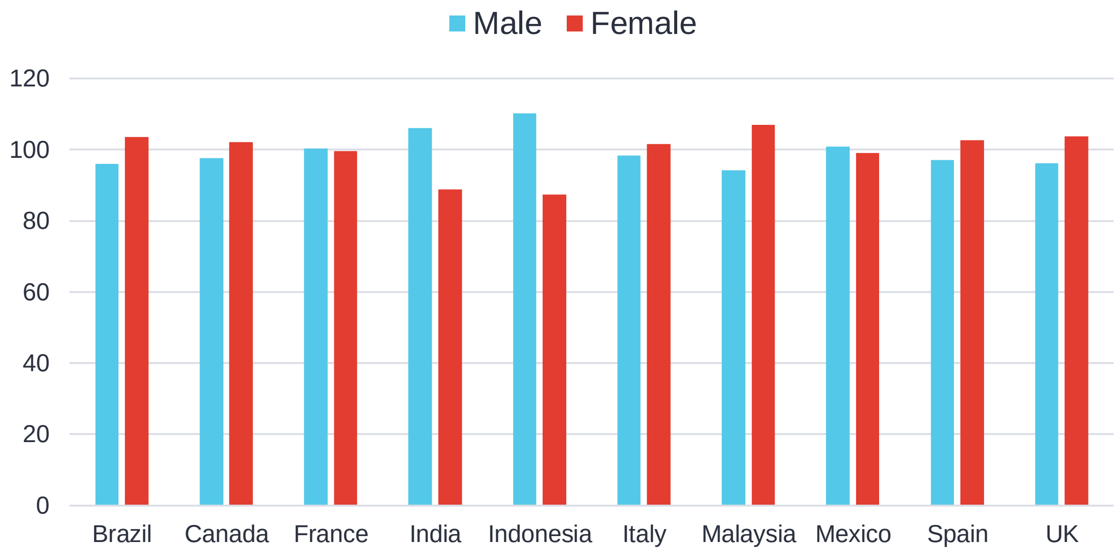
In most countries, **under 35s tend to be more likely to use travel apps.** For some countries, such as Brazil, Canada, Indonesia, Italy, Malaysia and Spain, the 25-34 age group is prevalent. For others such as France, India, Mexico, and the UK, the 18-24 segment carries greater weight. These different levels of adoption could be explained by a mix of technology savviness and stage in the lifecycle of the different age groups.

In terms of gender, while men tend to be the biggest users of travel apps in India, Indonesia and Mexico, the converse is true in all other countries, with **women having a greater representation in the mobile travel category.**

DEMOGRAPHIC COMPOSITION INDEX BY AGE GROUP

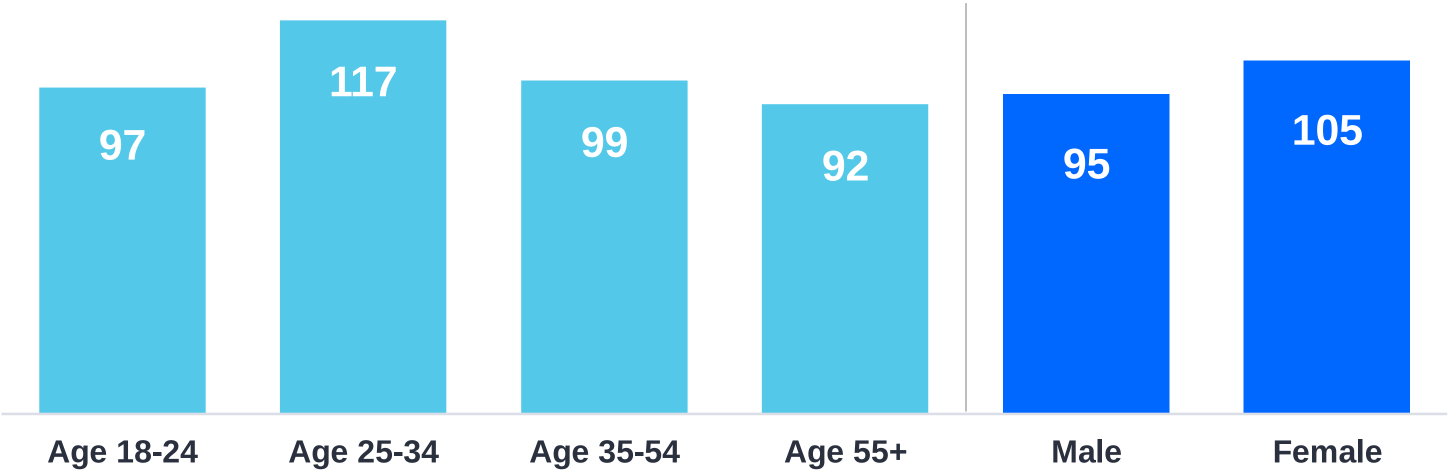


DEMOGRAPHIC COMPOSITION INDEX BY GENDER GROUP



Travel apps in the U.S.

In the U.S., Travel apps reach 37% of the total app audience: a 37% increase since June 2017. Audiences are fairly evenly spread across all age and gender cohorts, and only about 70% of total time spent on travel apps and sites is on mobile.

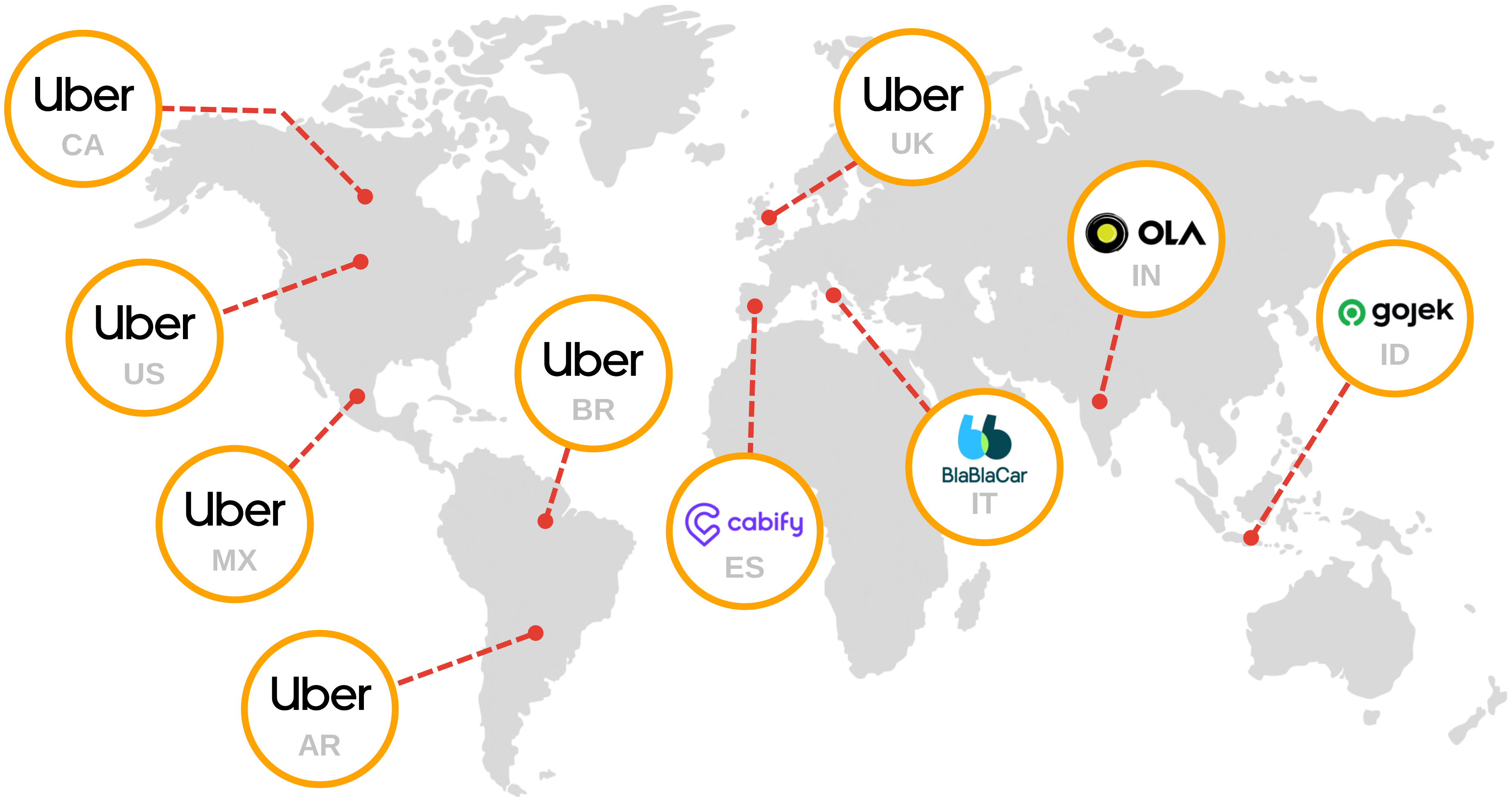


DEMO COMPOSITION INDEX

TIME SPENT

Source: Comscore MMX® Multi-Platform & Mobile Metrix®, Mobile App Only, Travel Category, June 2019, U.S.

Top ridesharing apps worldwide by unique visitors



Across the globe, Uber has a strong hold on ride sharing in many of the world's markets. However, in countries like India and Indonesia, Uber plays second fiddle to companies like Ola Cabs and Go-Jek.

Uber is the top ridesharing app in the U.S. by unique visitors, (next page) with Lyft coming in second. Between June 2017 and June 2019, Uber has seen a 57 percent increase in Unique Visitors, while Lyft has seen an 83 percent increase in Unique Visitors. On average, US users spend 22 minutes a month in the Uber app, versus 17 minutes in the Lyft app.

Source: Comscore Mobile Metrix®, App Only, June 2019

Uber leads the way for U.S. ride sharing and mobility

Uber and Lyft: The top ride sharing apps in the U.S.

Via a distant third

Lyft UVs increased **83 percent** since June 2017

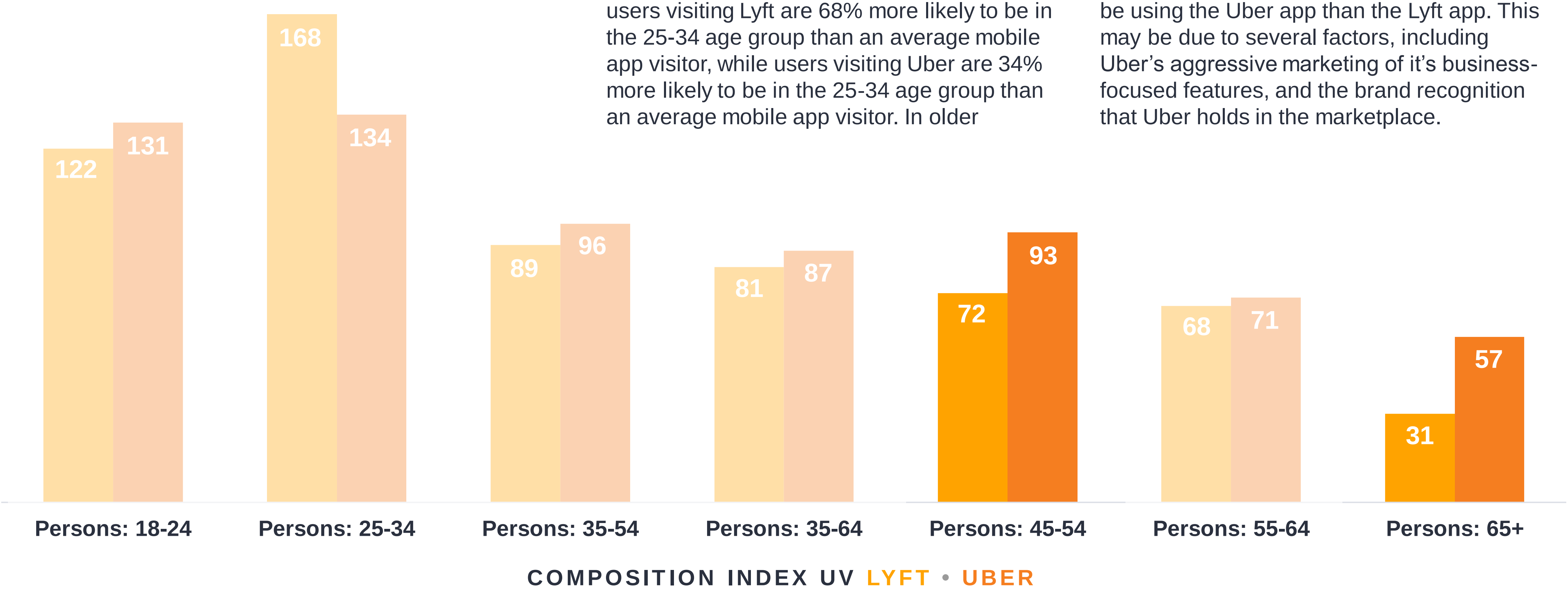
Uber has seen a large increase as well, **up 57 percent** over the same timeframe

On average, users spend **22 minutes a month on Uber** versus **17 minutes on Lyft**

Source: Comscore Mobile Metrix®, Mobile App Only, June 2019, U.S.

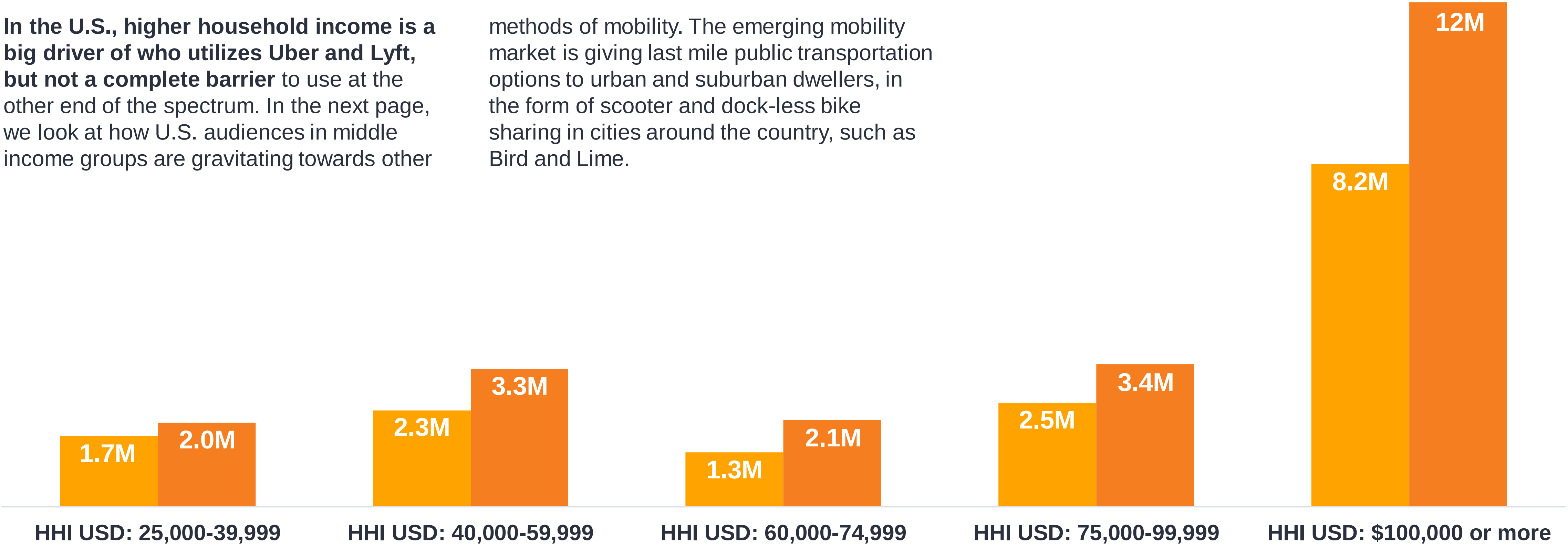
Tale of the tape: Uber vs. Lyft in the U.S.

Visits to both Uber and Lyft apps are driven by younger adults in the U.S. In fact, users visiting Lyft are 68% more likely to be in the 25-34 age group than an average mobile app visitor, while users visiting Uber are 34% more likely to be in the 25-34 age group than an average mobile app visitor. In older demographics, a visitor in the 45-54 or the 65+ age groups is significantly more likely to be using the Uber app than the Lyft app. This may be due to several factors, including Uber's aggressive marketing of it's business-focused features, and the brand recognition that Uber holds in the marketplace.



Ride sharing appears to be linked with higher incomes in the U.S.

In the U.S., higher household income is a big driver of who utilizes Uber and Lyft, but not a complete barrier to use at the other end of the spectrum. In the next page, we look at how U.S. audiences in middle income groups are gravitating towards other methods of mobility. The emerging mobility market is giving last mile public transportation options to urban and suburban dwellers, in the form of scooter and dock-less bike sharing in cities around the country, such as Bird and Lime.

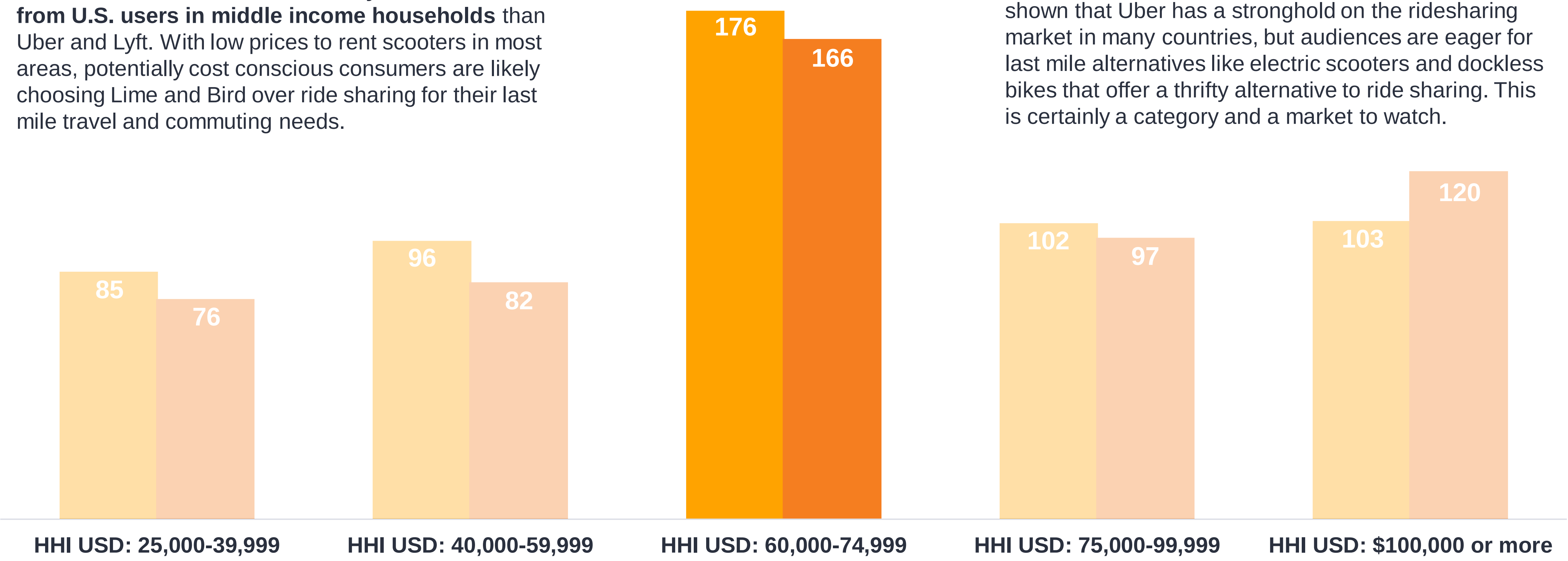


UNIQUE VISITORS BY HOUSEHOLD INCOME LYFT • UBER

Emerging mobility apps in the U.S.: Bird and Lime

Bird and Lime are both more likely to see visits from U.S. users in middle income households than Uber and Lyft. With low prices to rent scooters in most areas, potentially cost conscious consumers are likely choosing Lime and Bird over ride sharing for their last mile travel and commuting needs.

Our deep dive into ridesharing and mobility has shown that Uber has a stronghold on the ridesharing market in many countries, but audiences are eager for last mile alternatives like electric scooters and dockless bikes that offer a thrifty alternative to ride sharing. This is certainly a category and a market to watch.



APP AUDIENCE COMPOSITION INDEX UV BIRD • LIME

2

CATEGORY DEEP DIVES

Retail & digital commerce

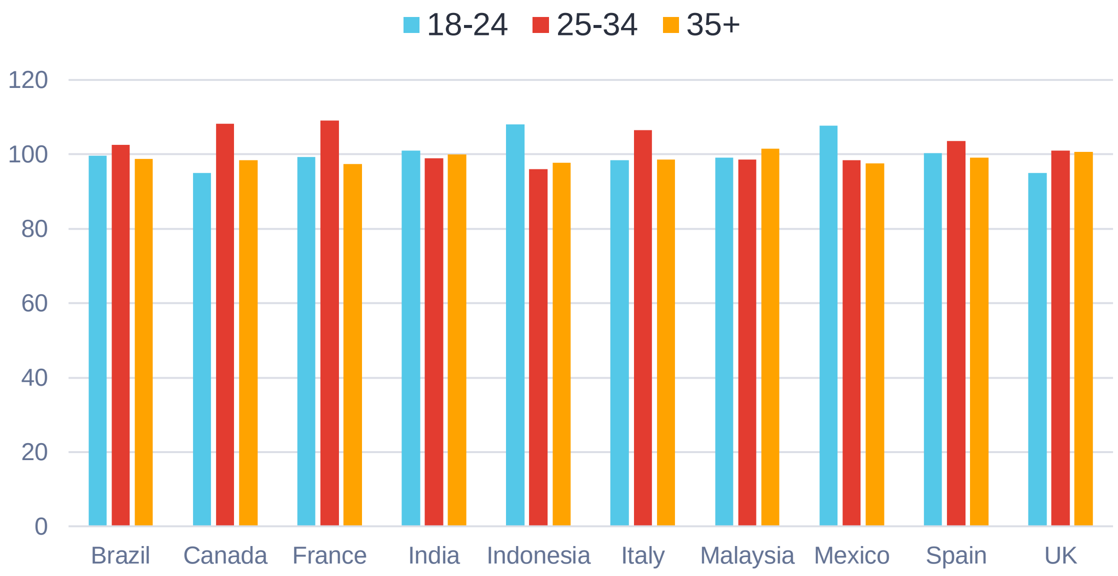
Adoption of retail apps

BY AGE AND GENDER GROUP

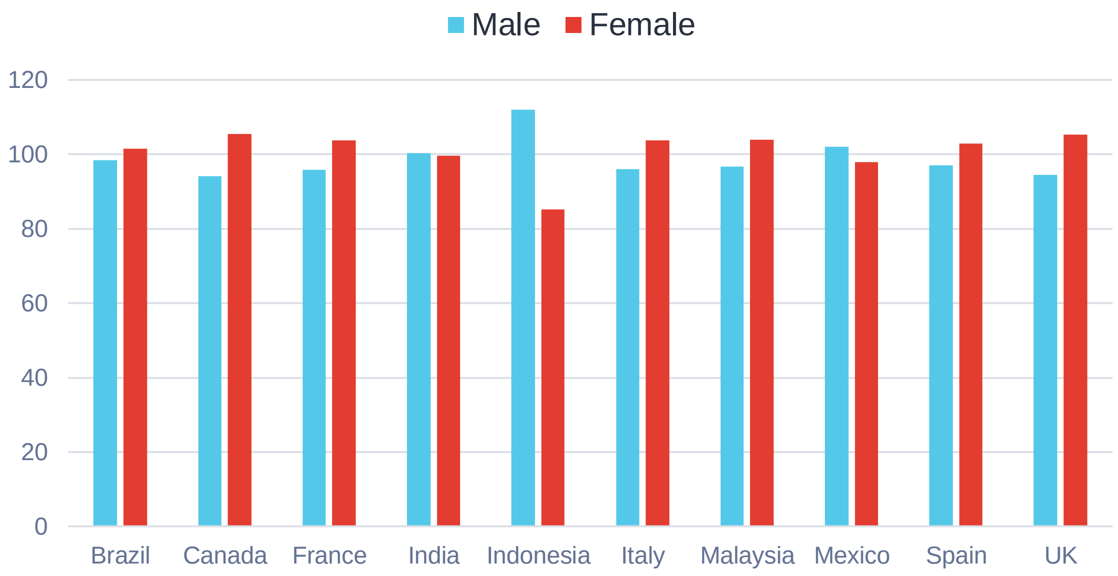
While in India and Indonesia the adoption of retail apps is highest among consumers in the 18-24 age group, in Canada, France, Italy and Spain it is highest among the 25-34. But the key observation perhaps is that no age groups over- or under-index significantly. This clearly reflects the broad acceptance of mobile retail across all consumer segments.

A noteworthy fact is that **the weight of female audiences is greater than for male audiences.** This is a pattern observed in all countries except India, Indonesia and Mexico.

DEMOGRAPHIC COMPOSITION INDEX BY AGE GROUP

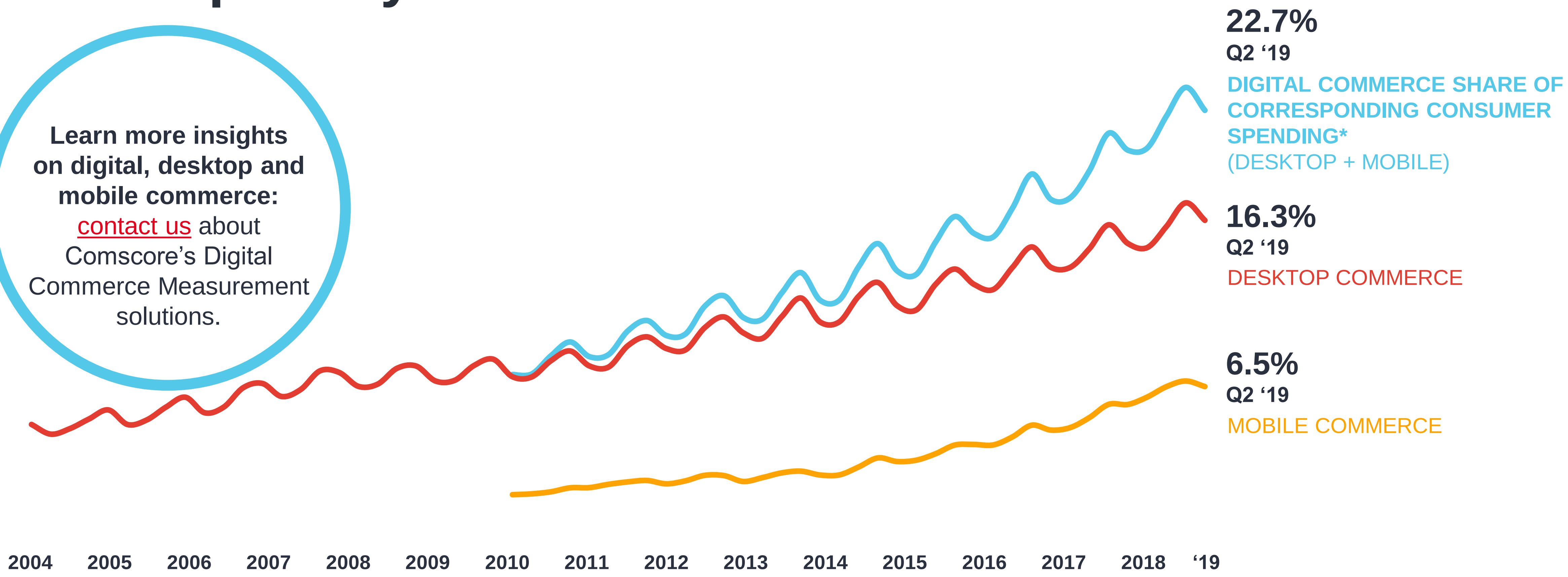


DEMOGRAPHIC COMPOSITION INDEX BY GENDER GROUP



By the end of Q2 2019 in the U.S., total digital commerce accounts for more than 1-in-5 discretionary dollars spent by consumers

Learn more insights on digital, desktop and mobile commerce: contact us about Comscore's Digital Commerce Measurement solutions.



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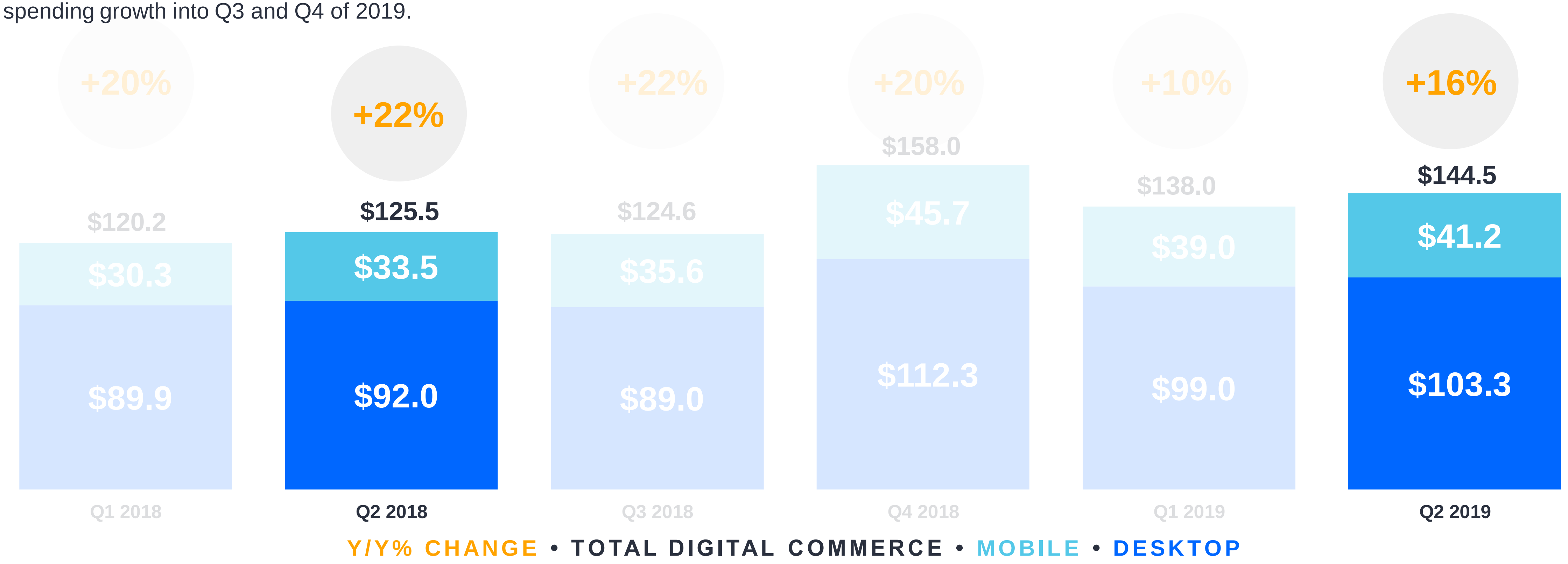
Source: Comscore Digital Commerce Measurement & U.S. Department of Commerce (DOC) for Retail , U.S.
*Note: e-Commerce share is shown as a percent of DOC's Total Retail Sales excluding Food Service & Drinking, Food & Bev. Stores, Motor Vehicles & Parts, Gasoline Stations and Health & Personal Care Stores

Retail digital commerce (desktop + mobile) is up 16% YOY in Q2 2019 in the U.S.

In terms of mobile commerce, we can see growth of about 8 billion dollars in 2019, which represents about a 25% year over year increase from Q2 2018 to Q2 2019. Consumers are choosing to interact with retail more and more on their mobile devices, with expectations for continued mobile spending growth into Q3 and Q4 of 2019.

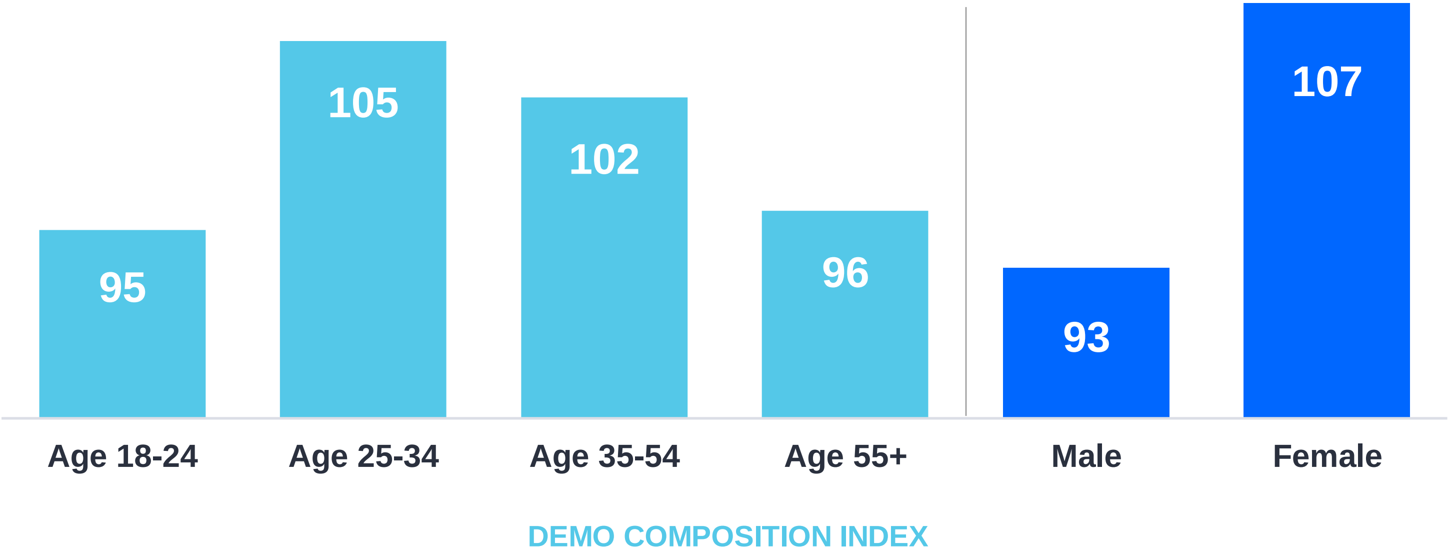


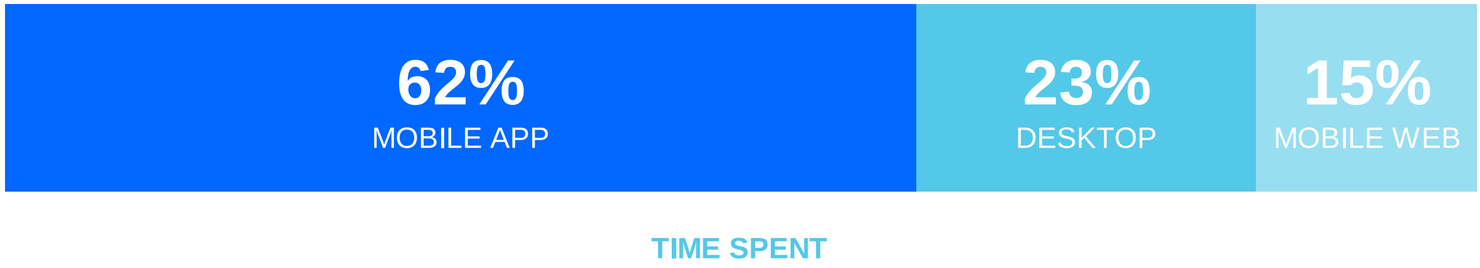
Source: Comscore Digital Commerce Measurement, U.S.

Retail apps in the U.S.

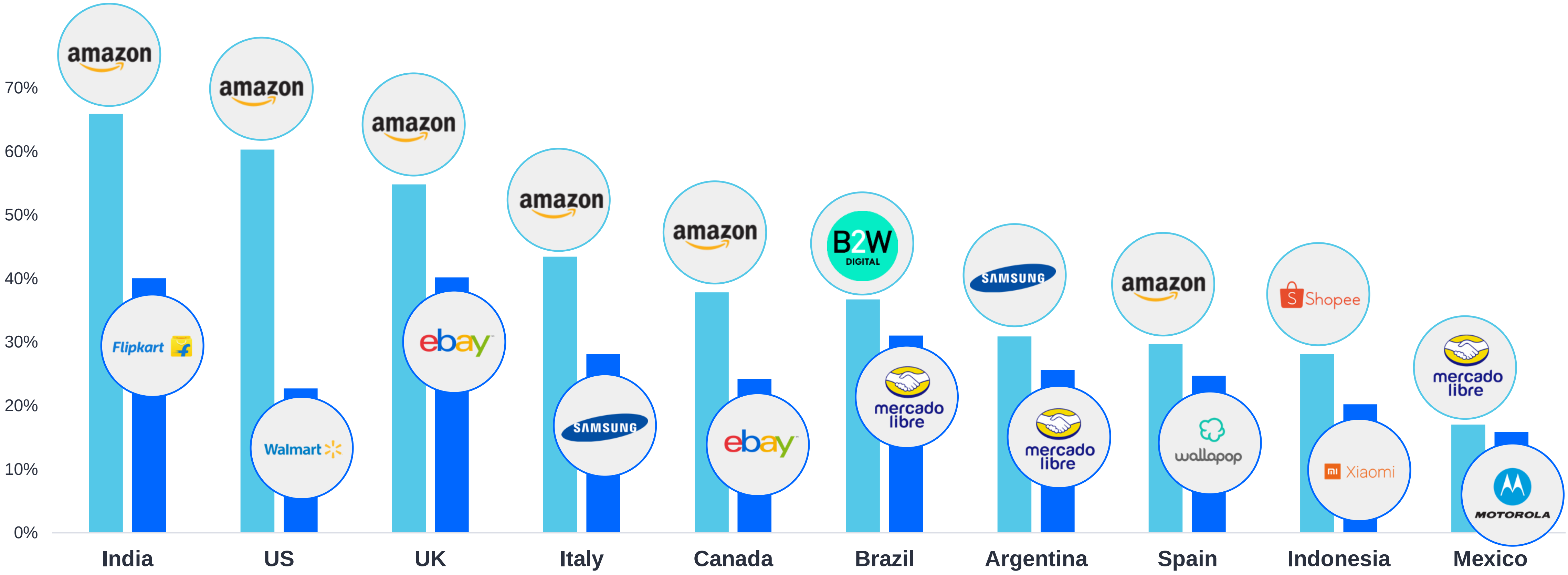
Looking at a snapshot of the retail category in the U.S., retail apps reached 87% of the total app audience in 2019: a 16% increase since June 2017. Total audience is tends to skew 25-54 and female. Interestingly, we still see almost a quarter of time spent consuming retail content on desktop, which may be due to the larger screen real estate that can facilitate a closer examination of online purchases.

Amazon dominates the mobile retail market in the U.S., UK, Italy, and Canada (next page), but we see much tighter competition for visitors in countries like Brazil, Mexico, and Spain.





Amazon dominates the West; Fragmented market for Retail apps in LATAM



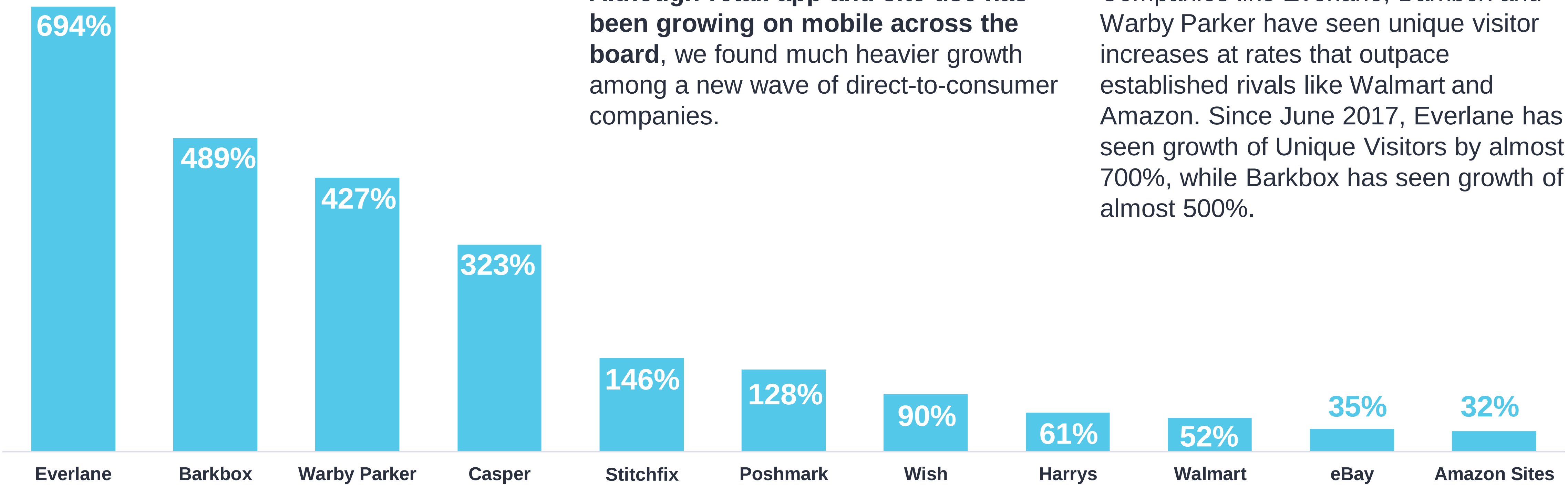
REACH OF TOP RETAIL APP VS NEXT LARGEST COMPETITOR: #1 REACH RETAIL APP • COMPETITOR

Source: Comscore Mobile Metrix®, Mobile App Only, Retail, June 2019, Multiple countries

Direct to Consumer mobile audiences grew faster than established retail competitors in the U.S.

Although retail app and site use has been growing on mobile across the board, we found much heavier growth among a new wave of direct-to-consumer companies.

Companies like Everlane, Barkbox and Warby Parker have seen unique visitor increases at rates that outpace established rivals like Walmart and Amazon. Since June 2017, Everlane has seen growth of Unique Visitors by almost 700%, while Barkbox has seen growth of almost 500%.



% INCREASE IN TOTAL UNIQUE VISITORS MOBILE WEB & APP, US, JUNE 2017 TO JUNE 2019

Source: Comscore Mobile Metrix®, Mobile Web & App, June 2019 vs June 2017, U.S.

Established retail is still king of scale on mobile in the U.S.

TOTAL UNIQUE VISITORS (000): JUNE 2017 • JUNE 2019

However, direct-to-consumer companies still have a ways to go if they want to truly challenge the retail giants. Amazon, Walmart, eBay and Wish are the leaders of scale on mobile in the U.S. with steady growth and massive reach.

Wish is a particularly interesting case – it's interface facilitates an easy, fun to browse and discover user experience, which has powered it to almost two times the number of unique visitors since June, 2017.

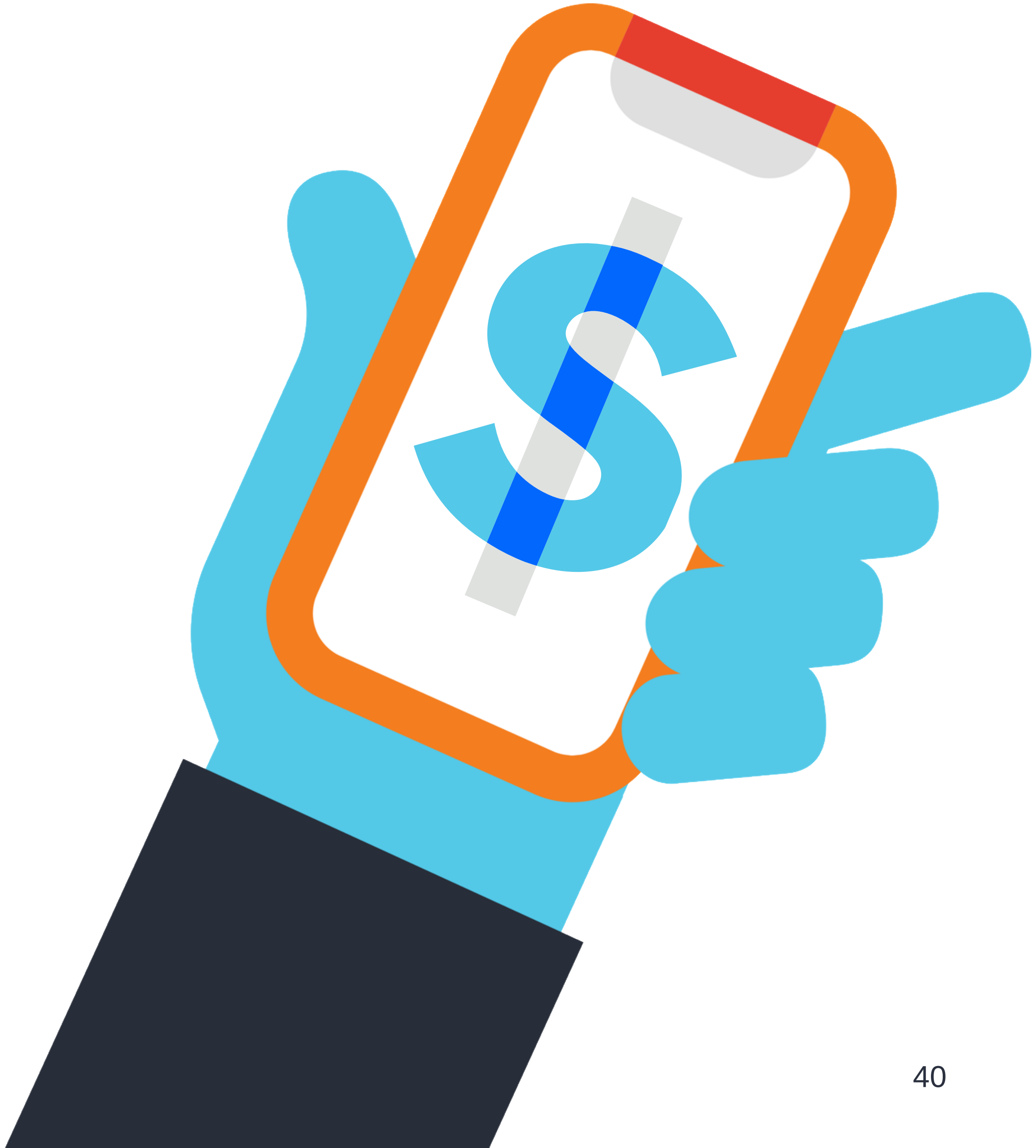
Regardless of what app people use, it is clear that mobile commerce is poised for massive growth in the near future. Companies that focus on a mobile-first strategy have the opportunity to capture shifting revenue other channels, as well as reshape how consumers interact with their online and real world stores.

Source: Comscore Mobile Metrix®, Mobile Web & App, June 2017 and June 2019, U.S.

2

CATEGORY DEEP DIVES

Mobile ordering

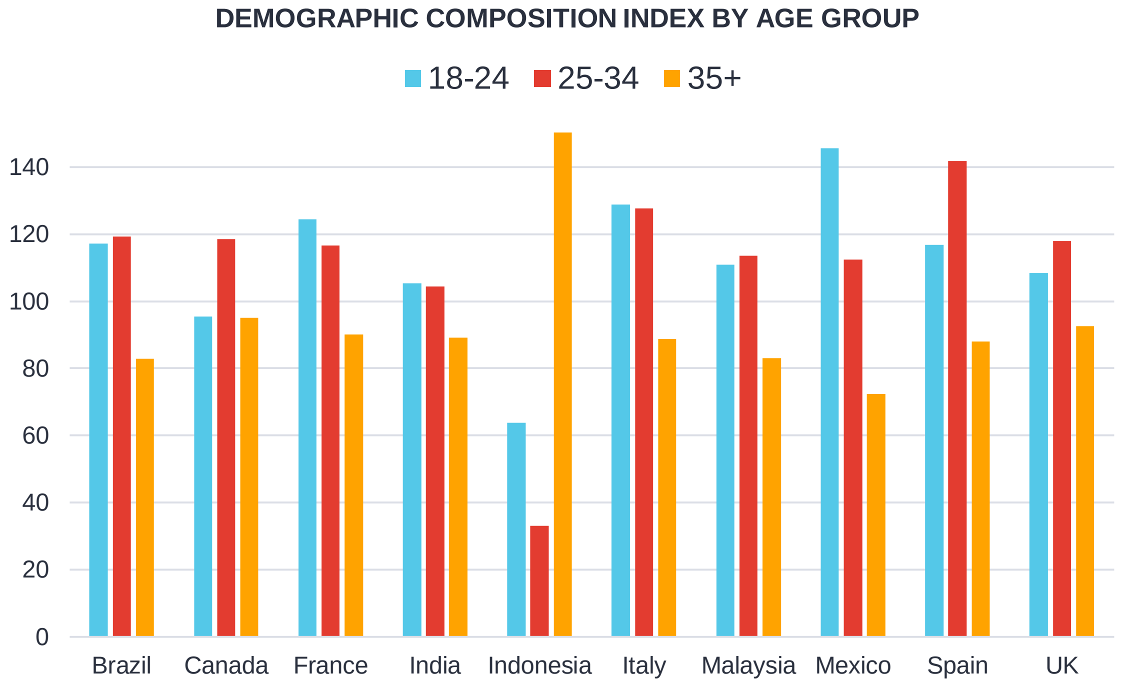


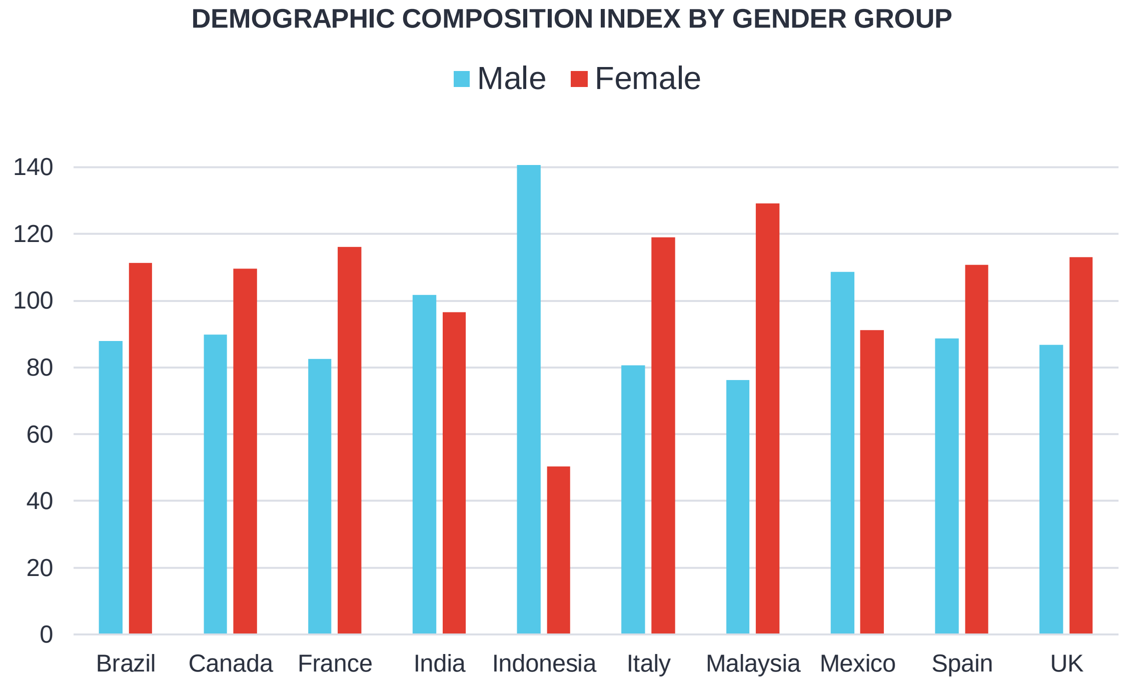
Adoption of food apps

BY AGE AND GENDER GROUP

Mobile food ordering skews heavily towards younger audiences. Specifically, consumers under 35 years old dominate the landscape in almost all countries, with the notable exception of Indonesia.

Moreover, in all countries except India, Indonesia, and Mexico**, female audiences tend to dominate the category.**

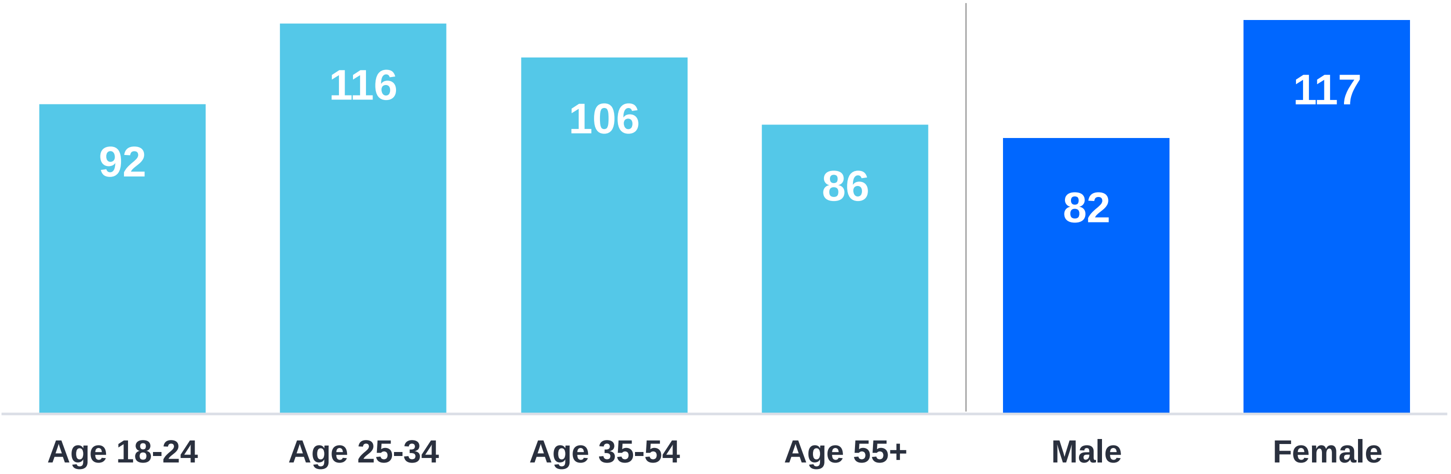




Source: Comscore Mobile Metrix, September 2019, Brazil, Canada, France, Indonesia, Malaysia, Mexico, Spain and UK

Food apps in the U.S.

In the U.S., food apps reached 44% of the total app audience in 2019: a 63% increase since June 2017. Total audience tends to be evenly distributed across age groups, but skew slightly female.



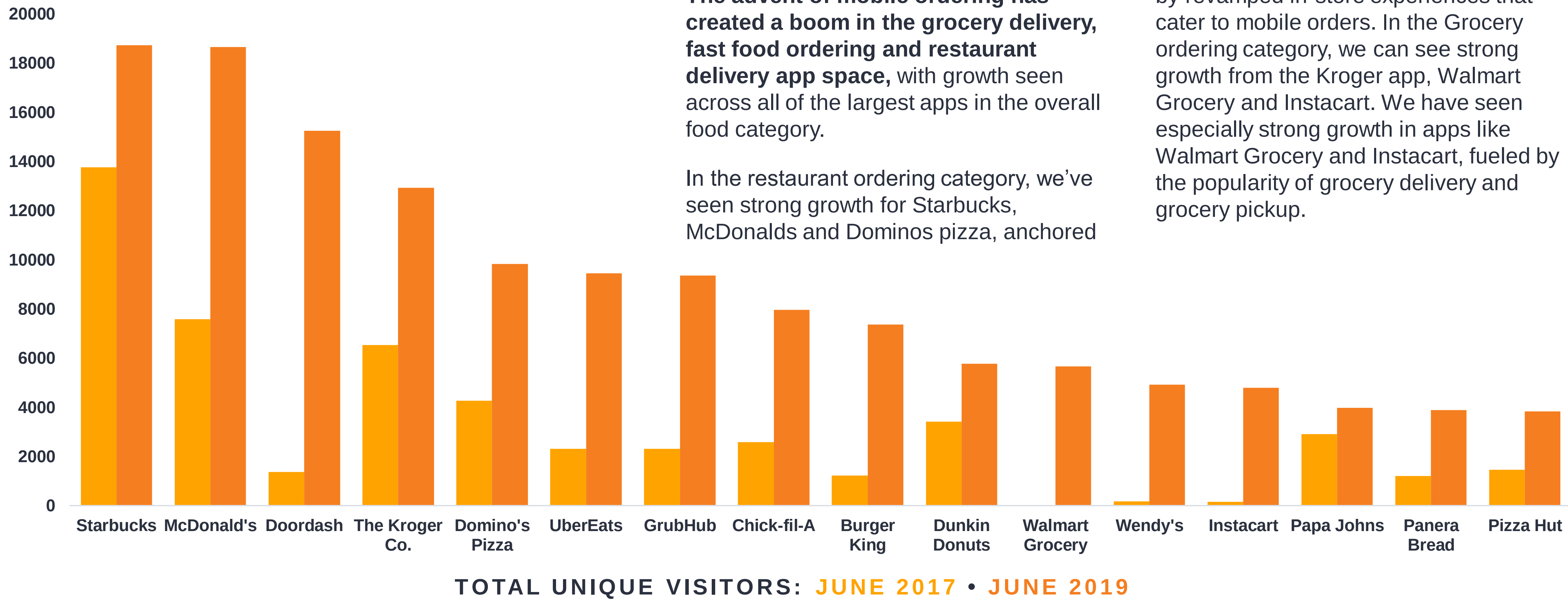
DEMO COMPOSITION INDEX

TIME SPENT

Mobile ordering has created significant growth across food delivery, fast food, grocery and grocery delivery apps in the U.S.

The advent of mobile ordering has created a boom in the grocery delivery, fast food ordering and restaurant delivery app space, with growth seen across all of the largest apps in the overall food category.

In the restaurant ordering category, we've seen strong growth for Starbucks, McDonalds and Dominos pizza, anchored by revamped in-store experiences that cater to mobile orders. In the Grocery ordering category, we can see strong growth from the Kroger app, Walmart Grocery and Instacart. We have seen especially strong growth in apps like Walmart Grocery and Instacart, fueled by the popularity of grocery delivery and grocery pickup.

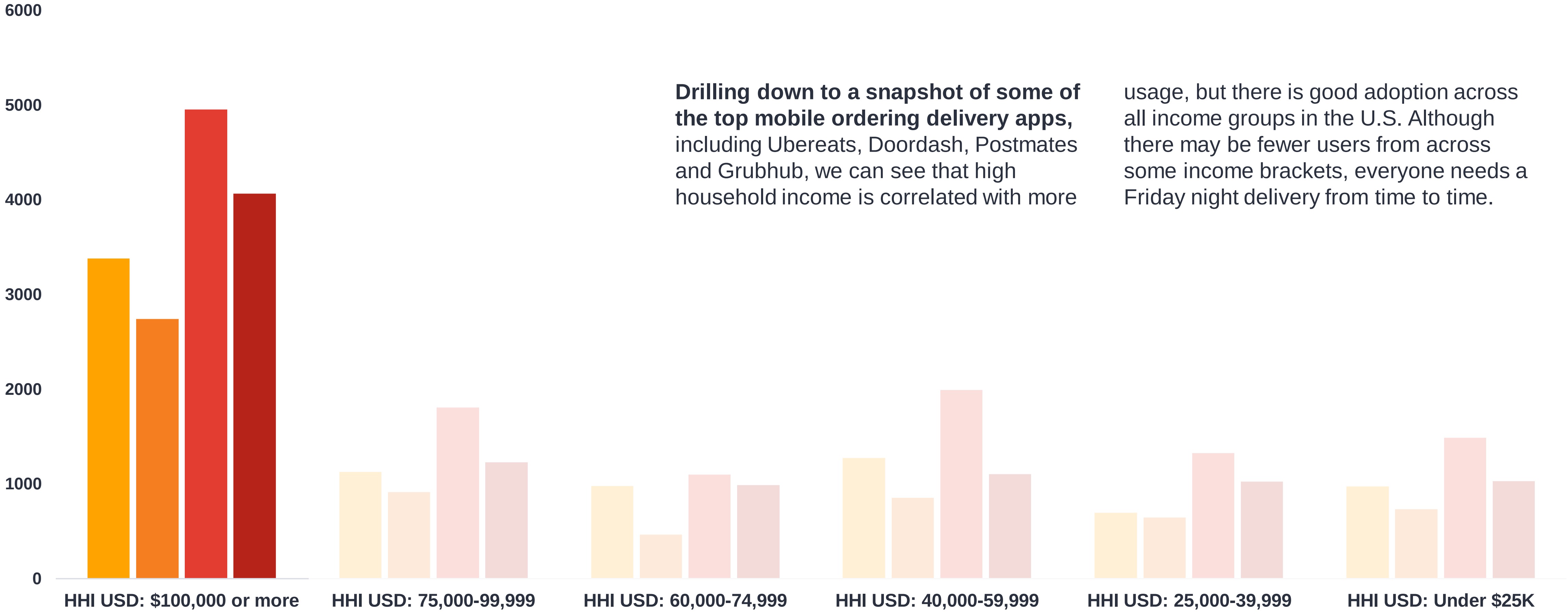


comscore

Source: Comscore Mobile Metrix®, Mobile App Only, June 2017 & June 2019, U.S.

Mobile ordering: spotlight by household income (U.S.)

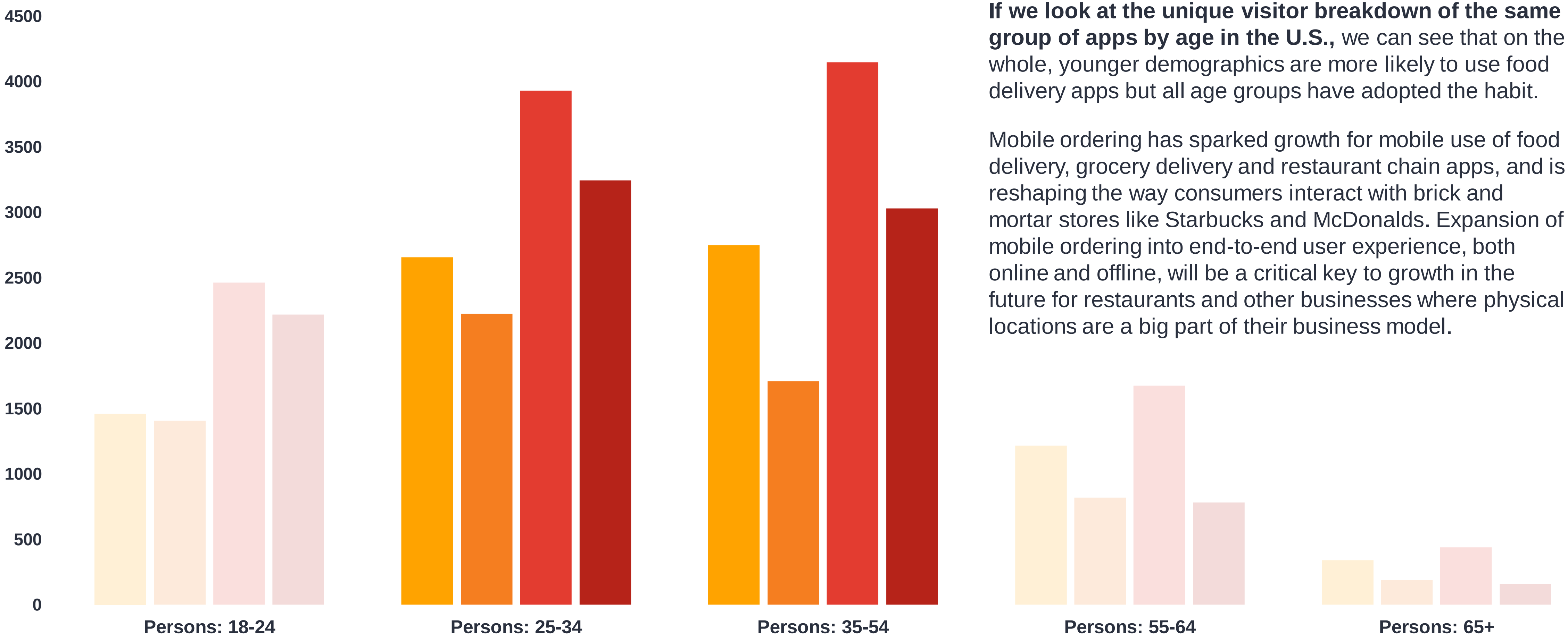
Drilling down to a snapshot of some of the top mobile ordering delivery apps, including Ubereats, Doordash, Postmates and Grubhub, we can see that high household income is correlated with more usage, but there is good adoption across all income groups in the U.S. Although there may be fewer users from across some income brackets, everyone needs a Friday night delivery from time to time.



TOTAL UNIQUE VISITORS (000) BY HOUSEHOLD INCOME: GRUBHUB • POSTMATES • DOORDASH • UBEREATS

Source: Comscore Mobile Metrix®, Mobile App Only, June 2019, U.S.

Mobile ordering: spotlight by age (U.S.)



TOTAL UNIQUE VISITORS (000) BY AGE: GRUBHUB • POSTMATES • DOORDASH • UBEREATS

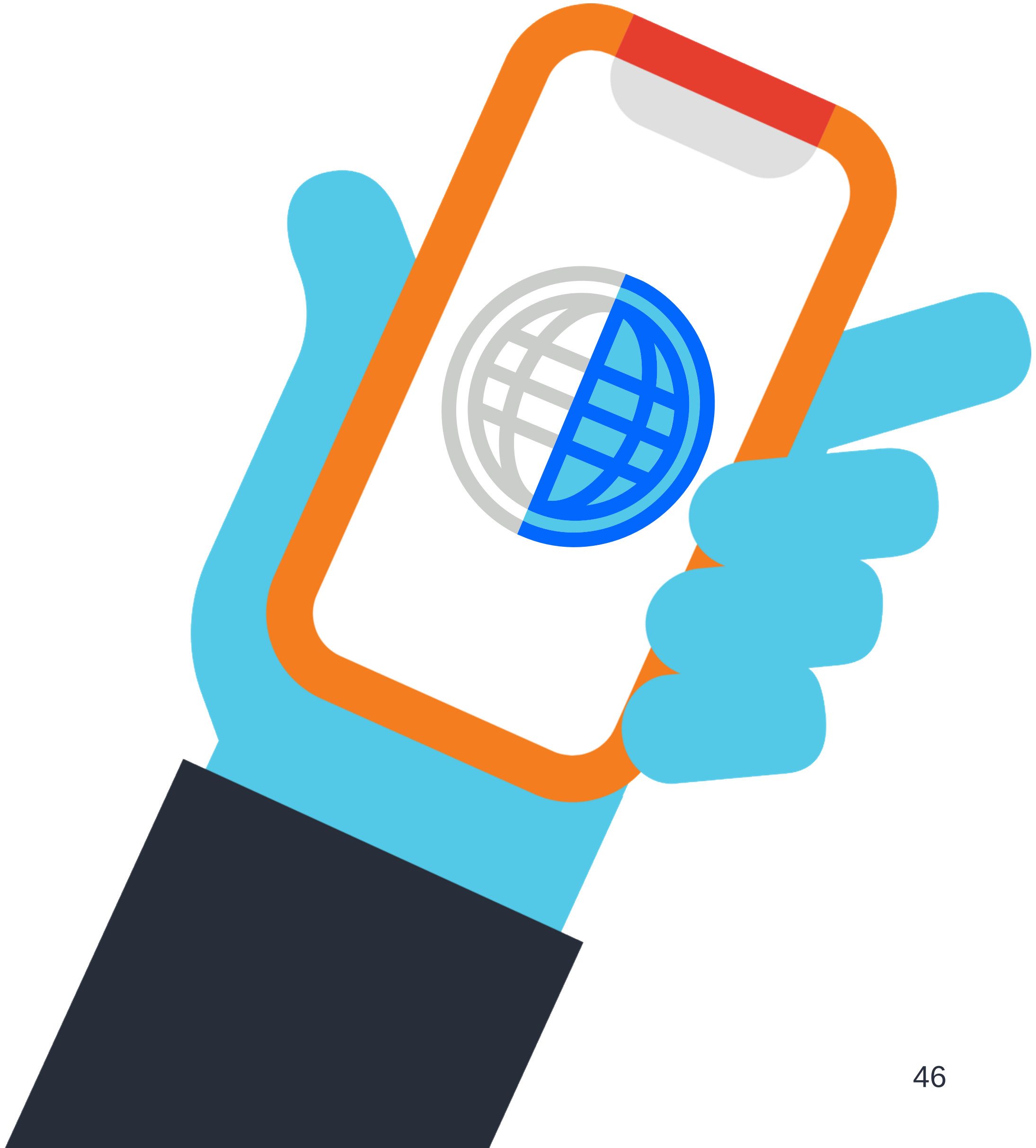
If we look at the unique visitor breakdown of the same group of apps by age in the U.S., we can see that on the whole, younger demographics are more likely to use food delivery apps but all age groups have adopted the habit.

Mobile ordering has sparked growth for mobile use of food delivery, grocery delivery and restaurant chain apps, and is reshaping the way consumers interact with brick and mortar stores like Starbucks and McDonalds. Expansion of mobile ordering into end-to-end user experience, both online and offline, will be a critical key to growth in the future for restaurants and other businesses where physical locations are a big part of their business model.

Source: Comscore Mobile Metrix®, Mobile App Only, June 2019, U.S.

3

Outlook for global mobile



Key Takeaways

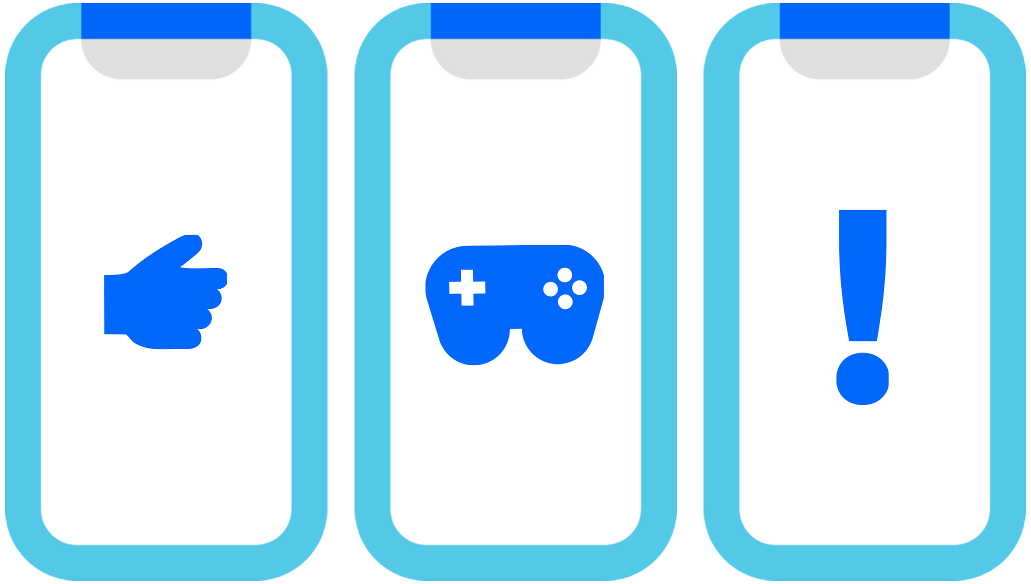
1

Audiences are spending their mobile time on apps (more than ever before)

Key Takeaways

2

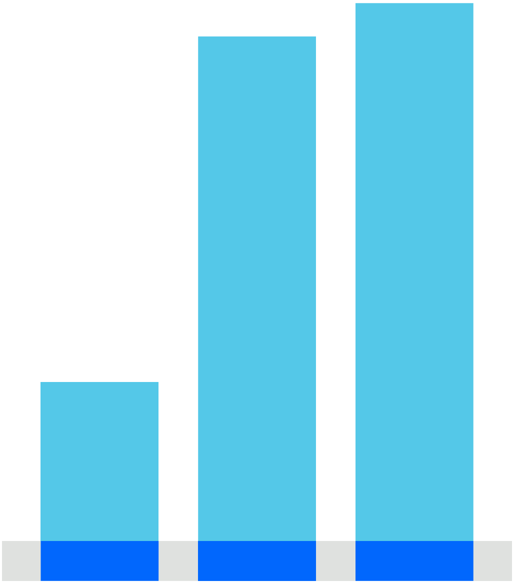
Mobile-first categories are becoming entrenched



Key Takeaways

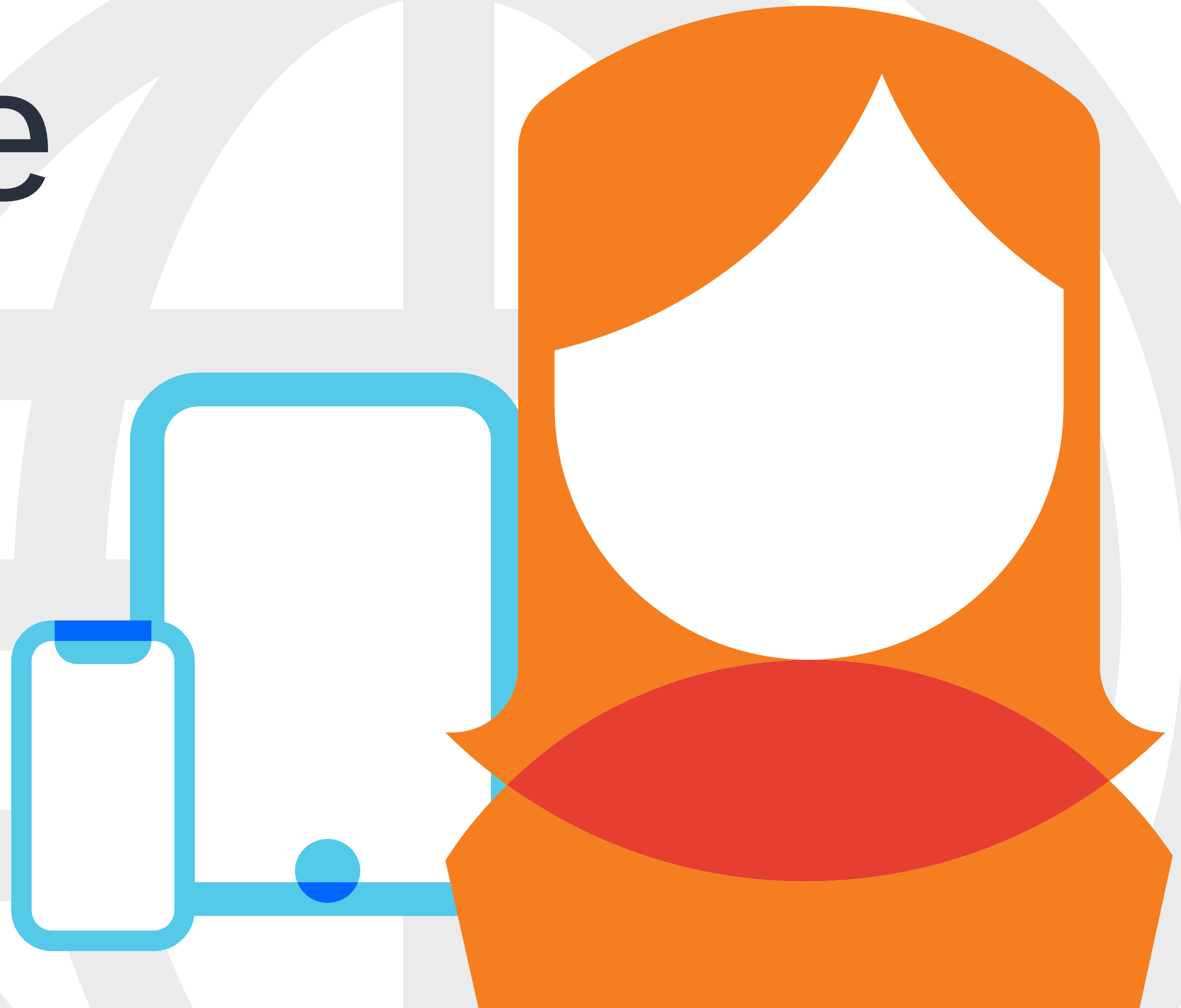
3

Mobile commerce is booming



Global State
of Mobile

2019 report



FOR MORE INFORMATION, PLEASE CONTACT US AT:
comscore.com/learnmore

Appendix and definitions

- **Freemium**: Apps that are free to download, but contain upgrades and in-app items that can be purchased.
- **Battle Royale**: Online, Multiplayer games (often with 100+ players per game session) where players battle to be the last gamer standing.
- **Rewarded Advertisements**: Ads (most often video or rich media interactive creatives) that are presented to users in exchange for in-app items. These ads are always user initiated.

Products & reports referenced in this report

PRODUCTS

- Comscore MMX® Multi-Platform
- Comscore Mobile Metrix®
- Comscore MobiLens ® Plus

CUSTOM REPORTS

- Comscore State of Gaming Report, 2019, U.S.
- Contact us to learn more: Comscore Digital Commerce Report, 2019, U.S.

Besides the countries in this report, Comscore offers global measurement for a comprehensive view of audiences regardless of where they spend their time

NORTH AMERICA
Canada
U.S.

ASIA PACIFIC
Australia
China
Hong Kong
India
Indonesia
Japan
Malaysia
New Zealand
Singapore
Taiwan
Vietnam

EUROPE
Finland
France
Germany
Ireland
Italy
Norway
Spain
Sweden
Switzerland
U.K.

LATIN AMERICA
Argentina
Brazil
Chile
Colombia
Mexico
Peru