NEW GOOGLE DATA

How People Use Their Devices

What Marketers Need to Know

September 2016

Section1

Device Usage in an Average Day



Section 2

What We Do On Our Devices



Section 3

How We Search Across Devices



Introduction

The proliferation of devices has changed the way people interact with the world around them. With more touchpoints than ever before, it's critical that marketers have a full understanding of how people use devices so that they can be there and be useful for their customers in the moments that matter.

The findings in this report are based on real behavior from a sample of opted-in users. It reveals how, when, and where people use their devices throughout the day. As marketers, this important context will help you better understand the reality of the customer journey so you can more effectively reach them with a single story across devices, channels, and formats.

A Few Key Findings:

- 1. **We live in a mobile-first world:** In an average day, more than 1/4 of all users only use a smartphone, which is nearly 2X as many as those who only use a computer.
- 2. **We freely move back and forth between devices to get things done:** Over half of users rely on more than one type of device in an average day, with 1/5 of them using another device while concurrently using a computer.
- 3. Where we are influences how we use our devices: The top three places people use their smartphones are home, work, and in a store.
- 4. **Search has gone mobile:** Of those who search, nearly 4 in 10 search only on a smartphone in an average day.
- 5. **The web is one of our most used resources:** Of those who browse the web in an average day, almost half do so on multiple devices. More than 7 in 10 users browse the web on their phones or computers in an average day.

Methodology

Data used in this report:

• Unless otherwise noted*, the data in this report is based on findings from a behavioral measurement of a convenience sample of 11,964 opt-in Google users between January 1, 2016 and March 31, 2016. Data is calibrated to reflect a U.S. demographic of 18 to 49-year-old cross-device users.

To be included in the sample, opt-in users needed to meet the following criteria:

- Age 18-49, residing in the U.S.
- Be an active cross-device user, defined as someone who used a Chrome, Internet Explorer, or Firefox browser on computer <u>and</u> an Android smartphone or tablet device for personal use (work devices not included). They must have visited at least 100 computer URLs and spent at least two hours on an Android device for the duration of the study.
- Signed into Google and turned on Location History. Users have also opted in to share location data.
- <u>Click here</u> for more methodology details and metric definitions.

Source: All stats referenced, unless otherwise noted*, are based on the following:

Google data, based on convenience sample of opt-in U.S. cross-device users, age 18-49 who signed into Google and turned on Location History (mobile Android-only and IE/Chrome/Firefox computer browser). Calibrated to population studied, January 2016 - March 2016. Location analysis excludes locations that are not identifiable. Apps include browser apps. Search includes Google Search only.

*Other data sources used in the report (source noted on the slide) include Google search data and YouTube internal data.

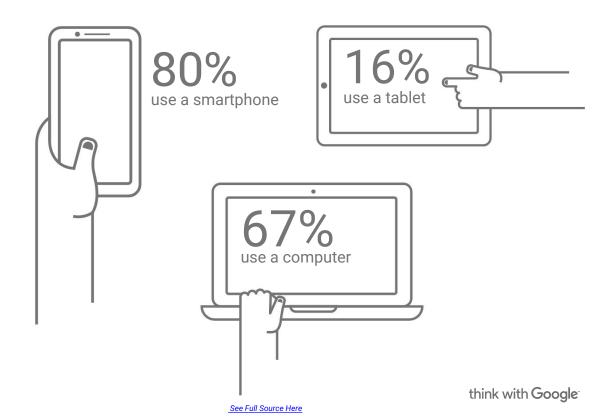
Device Usage in an Average Day

We Live in a Mobile-First World

We live in a world where people literally expect answers at their fingertips, and to find them, they're turning to the nearest device.

For marketers, more usage across more devices means there are more touchpoints to engage with audiences than ever before.

Device usage in an average day:

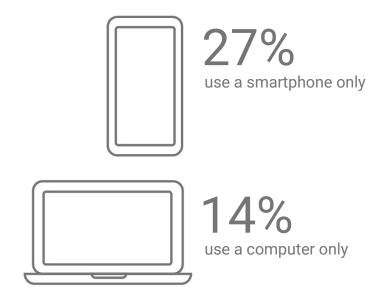


For a Quarter of Users, It's a Mobile-Only World

More than **1 in 4 users** *only* use a smartphone in an average day—almost 2X as many as those who only use a computer.

As a marketer, if you aren't reaching your customers on mobile, you risk missing out on 1/4 of your potential audience.

Device usage in an average day:

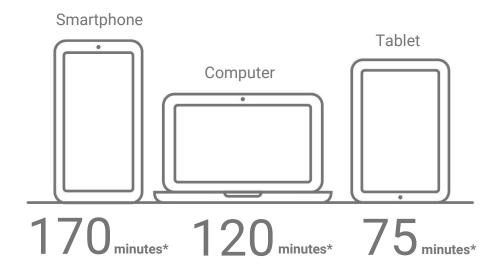


We Spend Almost 3 Hours a Day On Our Smartphones

A significant amount of our daily lives are spent on devices, with smartphones leading the way. Those who use a smartphone spend almost three hours per day on it.

And for many, computers and tablets are important daily resources. It's necessary that marketers consider the devices their customers are using at all times to reach them with the right message for the right screen.

Average time spent on devices used in an average day:

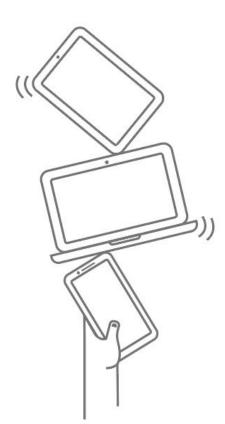


We Juggle Multiple Devices

We move back and forth between smartphones, tablets, and computers throughout the day.

When at home, **1/5** of people use another device while concurrently using a computer.

Fluid movement between devices changes our approach to marketing. Consumers now interact with your brand concurrently on more than one type of device, making it critical to provide the same great experience across screens.



Device usage in an average day:

57% use more than one type of device

21% are concurrent* users

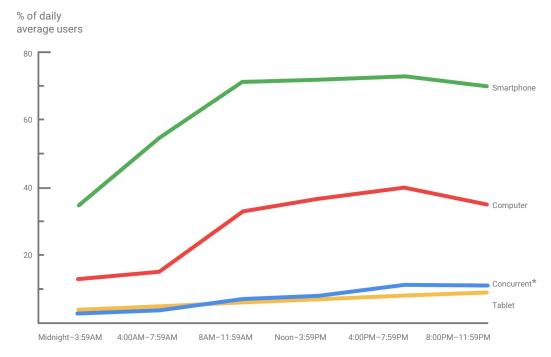
We Use Our Devices Throughout the Day

Understanding when your customers are most likely to be on their devices will help you make smart decisions about when and how to engage them.

Beginning in the morning, smartphone usage is consistent throughout the day and into the night, while computer usage peaks around 8:00 p.m.

Over 30% use their phones after midnight, so there's never really an off-time.

% of daily average device users by daypart





What We Do On Our Devices:

How We Search, Watch YouTube, Browse the Web, and Use Apps

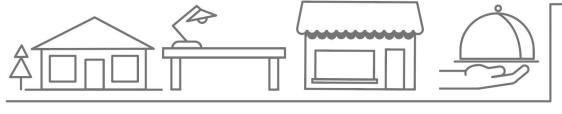








Top 4 Places We Use Our Smartphones in an Average Day



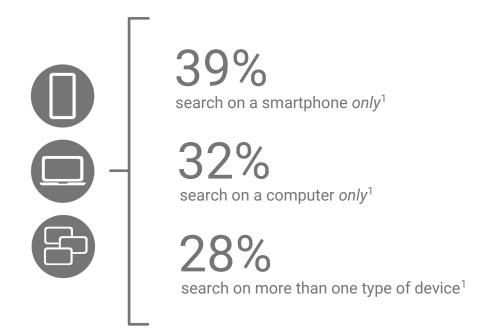
- 1. Home
- 2. Work
- 3. Stores*
- 4. Restaurants and Bars

Nearly 4 in 10 users search *only* on their smartphones in an average day.

As a result of this shift to mobile, we now see more Google searches happening on smartphones than on computers.²

However, in an average day, more than a quarter of users search across more than one type of device. It's necessary to reach your customers wherever they are.

Among users who search in an average day:

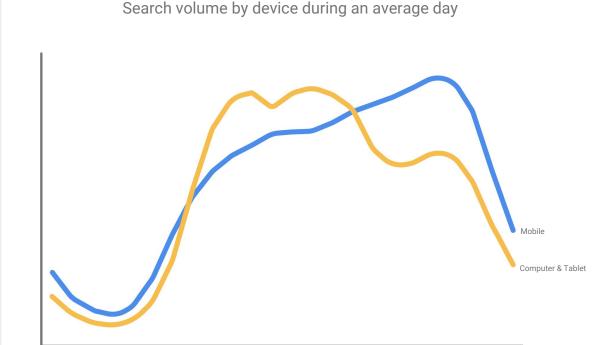


Q

More searches happen on mobile than on computers and tablets for 15 of the 24 hours in a typical day.

Mobile leads in the morning, but computers become dominant around 8 a.m. when people might start their workday.

Mobile takes the lead again in the late afternoon when people might be on the go, and continues to increase into the evening, spiking around primetime viewing hours.



Noon-3:59PM

4:00PM-7:59PM

8:00PM-11:59PM

8AM-11:59AM

Midnight-3:59AM

4:00AM-7:59AM

Mobile Search is Growing Across Categories



Year-over-year growth in mobile searches:

Click the links below for a deep dive into each theme



+30%



<u>Apparel</u>



Travel +25%



Media and Entertainment +20%



Home and Garden



Food and Beverage

+30%



Beauty and Personal Care



Consumer Electronics



<u>Finance</u>

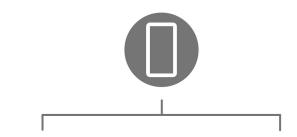
+35%

How We Watch YouTube on Our Phones

The best video experience is on whatever screen is most convenient.

In an average day, 4 in 10 users who watch YouTube do so only on their smartphones².

For marketers, this means it's necessary to ensure both media and creative strategies reflect the behaviors of your audience.



The average YouTube mobile viewing session is more than

40

Among users who watch YouTube in an average day

42%

watch on a smartphone *only*²

When We Watch YouTube on Different Devices

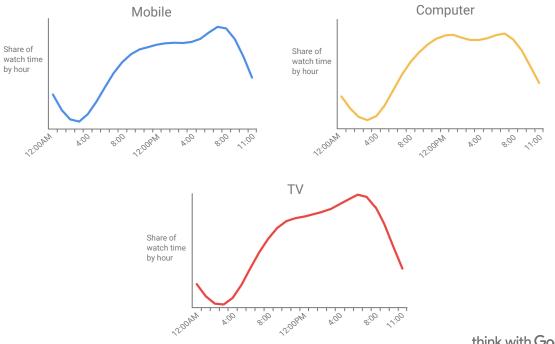
Whether on a smartphone, computer, or TV, we watch YouTube on different screens throughout the day.

YouTube watch time on TVs and smartphones spikes during primetime.

Computer watch time peaks around lunchtime, when people check out videos as they might be taking an afternoon break.

YouTube share of watch time, trended by screen-type

The trend lines do not represent watch time volume; they show relative share of watchtime for each device throughout the day.



think with Google

What We're Watching on YouTube by Screen-Type



While the majority of YouTube views are happening on mobile devices¹, there are some categories where viewership leans toward specific screens.

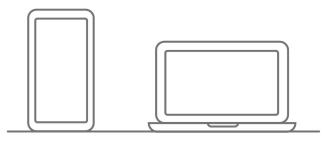
On computers, viewers are watching high involvement categories like Finance and Auto.

On mobile, YouTube plays a utility role, with Do-it-Yourself and Reviews among the content viewers watch.

Categories people watch on their devices²

Relative to total share of watch time by category on each device

Examples of fast-growing mobile search categories on YouTube³



Make-up

Finance

Do-it-Yourself Auto

Reviews Consumer Electronics



Entertainment*

Banking

Do-it-Yourself

Source 1: YouTube Internal Data, April 2016

Source 2: Google Internal Data, July 2016, U.S. Classification of video was based on public data such as headlines and tags, and may not account for every such video available on YouTube. Calculation compares the share of watch time for mobile and desktop across all categories in July 2016.

Source 3: Google Internal Data, U.S., Classification as "Banking," "Reaction," and "DIV" videos were based on public data such as headlines and tags, and may not account for every such video available on YouTube, July 2015 and July 2016.

think with Google

Devices We Use to Browse the Web



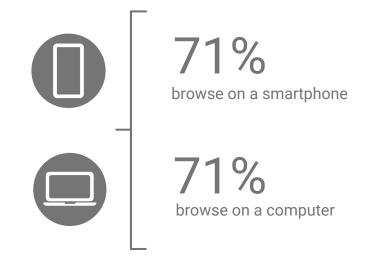
In an average day, almost everyone browses the web, making it one of our top digital activities.

The same percentage of users—more than 7 in 10—browse the web on their smartphones or computers.

With this even distribution, it's important that marketers consider the site experience their customers will see as they browse on a variety of devices.

94% browse the web in an average day

Among users who browse the web in an average day:



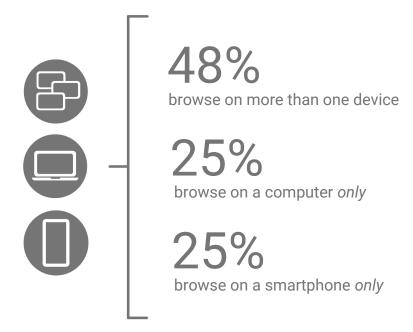
Web Browsing is a Cross-Screen Experience



Browsing the web across screens is the new normal for consumers, as nearly 50% browse on more than one screen in an average day.

With this reliance on multiple screens, connected messages across devices are more relevant for the user.

Among users who browse the web in an average day:



How We Browse Throughout the Day

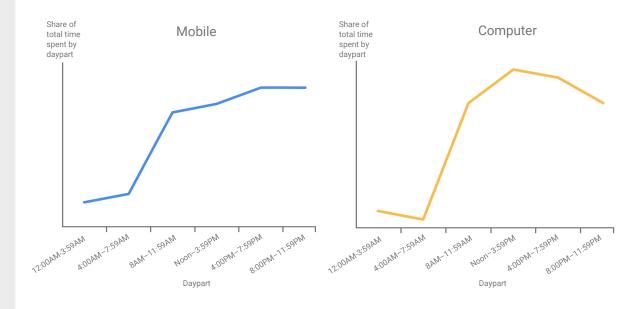


When browsing the web, there are clear times throughout the day when we turn to our smartphones and our computers:

Browsing on a computer increases in the afternoon and into the evening, with a peak between noon and 4:00 p.m.

Mobile browsing is consistent throughout the day, with a peak in the evening and nighttime hours.

Web browsing share of total time spent, trended by device The trend lines do not represent total time spent; they show relative share of usage for each device throughout the day.



How and When We Use Our Apps in an Average Day



On average, in a given hour when actively using their phone, users interact with 4.8 apps

| | / Email Apps | / Travel & Local Apps | / Social Apps | Shopping Apps | Messaging Apps | Browser Apps |
|---|-----------------------------|------------------------------------|----------------------------|-----------------------|--------------------------|--------------------------|
| App category includes: | Yahoo! Mail, Gmail, etc. | Google Maps, Waze, Airbnb, etc. | Facebook, Twitter, etc. | Amazon, eBay, etc. | WhatsApp, Kik, etc. | Chrome, Firefox, etc. |
| % of smartphone segment* who use this app-type | 71% | 27% | 75% | 33% | 88% | 83% |
| Among those who use this app-type on their smartphone | | | | | | |
| % who use at home | 45% | 28% | 47% | 40% | 45% | 44% |
| Peak daypart use, by total time spent | Late Morning | Evening | Night | Evening | Afternoon and Evening | Night |

How We Search Across Devices Category Deep-Dives

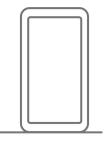
Beauty and Personal Care Search Trends



What people are searching for on their devices

Themes are relative to overall Beauty and Personal Care search share by device

Go back to slide



Mobile Themes¹

Nail Care

e.g. Nail salons near me, Nail designs

Body Art

e.g. Tattoos, Tattoo shops near me

Hair Care

e.g. Barber shop, Hairstyles (i.e. Balayage)



Computer & Tablet Themes¹

Fashion and Style

e.g. Saks, Gilt

Anti-Aging

e.g. Retinoids, Anti-aging

Spa

e.g. Facial spa, Yag laser



Fast Growing Mobile Themes²

Makeup and Cosmetics

Over 50% YoY growth

Perfumes and Fragrances

Over 40% YoY growth

Skincare

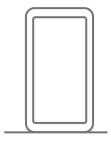
Over 35% YoY growth

Apparel Search Trends



What people are searching for on their devices Themes are relative to overall Apparel search share by device

Go back to slide



Mobile Themes¹

Prom Dresses

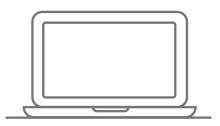
e.g. Homecoming dresses, cheap prom dresses

Baby and Toddler Clothing

e.g. Baby girl clothes, baby stores near me

Dry Cleaning and Alterations

e.g. Laundromat near me, 24-hour laundromat



Computer & Tablet Themes¹

Custom Clothing

e.g. Tailors, Suits

Plus Size Clothing

e.g. Women within, kingsize menswear

Suits and Business Attire

e.g. Dressy pant suit, strong suits



Fast Growing Mobile Themes²

Petite Clothing:

Over 80% YoY growth

Coats:

Over 55% YoY growth

Sleepwear:

Over 50% YoY growth

Auto Search Trends



What people are searching for on their devices
Themes are relative to overall Auto search share by device

Go back to slide



Mobile Themes¹

Station Wagons

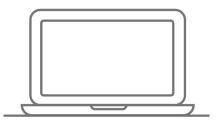
e.g. Mustang station wagon, ford focus hatchback

Pick-up Trucks

e.g. Ram, toyota tacoma

Sports Cars

e.g. audi r8, 2016 corvette



Computer & Tablet Themes¹

Campers and RVs

e.g. Motorhome specialist

Hybrid and Alternative Vehicle

e.g. Tesla motors, faraday future

Micro Cars and City Cars

e.g. Mini mania, clio columbia



Fast Growing Mobile Themes²

Hybrid and Alternative Vehicles:

Over 55% YoY growth

Campers and RVs:

Over 45% YoY growth

Vans and Minivans:

Over 40% YoY growth

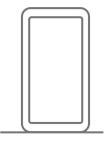
Consumer Electronics Search Trends



What people are searching for on their devices

Themes are relative to overall Consumer Electronics search share by device

Go back to slide



Mobile Themes¹

Car Speaker

e.g. 12-inch subwoofer, 6x9 speakers

Home audio equalizers

e.g. Bass booster, equalizer

Portable DVD players

e.g. Portable DVD players, dual screen portable DVD player



Computer & Tablet Themes¹

DVRs and Set-Top Boxes

e.g. X1 remote, DVR box

HD Players and Recorders

e.g. Live media player, playbox HD

Home Theater Projectors

e.g. Lumo projector, phone projector



Fast Growing Mobile Themes²

Home Audio Equalizers:

Over 80% YoY growth

DVD Players:

Over 60% YoY growth

GPS Devices:

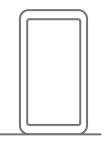
Over 50% YoY growth

Finance Search Trends



What people are searching for on their devices Themes are relative to overall Finance search share by device

Go back to slide



Mobile Themes¹

ATMs

e.g. ATM near me, cash point near me

Money Transfers and Wire Services

e.g. Western Union near me, how to fill out a money order

Banking

e.g. (bank brand) near me, (bank brand) online login



Computer & Tablet Themes¹

Accounting and Auditing e.g. IRS gov, W9

Grants, Scholarships, and Financial Aid e.g. Student loans, scholarships

Financial Planning and Management

e.g. Thrift savings plan, 401K calculator



Fast Growing Mobile Themes²

Investing:

Over 50% YoY growth

ATMs:

Over 50% YoY growth

Business Finance:

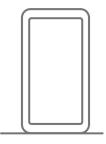
Over 35% YoY growth

Food and Beverage Search Trends



What people are searching for on their devices
Themes are relative to overall Food and Beverage search share by device

Go back to slide



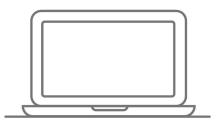
Mobile Themes¹

Pizza and Pizza Delivery e.g. Pizza near me, Pizza Hut

Fast Food Restaurants e.g. McDonalds, Chick-Fil-A

Juice

e.g. Juice bar, tropical smoothie



Computer & Tablet Themes¹

Restaurant Reservations and Booking e.g. Open Table, NYC restaurant week

Online Grocery Shopping and Delivery e.g. Peapod, Amazon Fresh

Prepared Foods

e.g. Meals delivered, prepared meal delivery



Fast Growing Mobile Themes²

Prepared Foods: Over 55% YoY growth

Restaurant Reservations and Booking: Over 55% YoY growth

Online Grocery Shopping and Delivery: Over 50% YoY growth

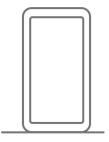
Source 1: Google Search Data, U.S., Jan - Jun 2016. Mobile & Computer Theme definition is relative to the specific category device share. To be considered a 'Mobile Theme,' it must be 5% more than the overall category mobile share of searches. To be considered a 'Computer Theme,' it must be 5% more than the overall category computer share of searches. Source 2: Google Search Data, U.S., Jan - Jun 2015 vs Jan - Jun 2016

Home and Garden Search Trends



What people are searching for on their devices
Themes are relative to overall Home and Garden search share by device

Go back to slide



Mobile Themes¹

Home Laundry

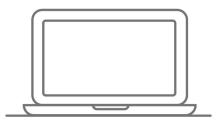
e.g. How to shrink a shirt, how to get a sharpie out of clothes

Pillows

e.g. Pregnancy pillows, boyfriend pillow

Playroom and Children's Furniture

e.g. Toddler table & chairs, booster seat for table



Computer & Tablet Themes¹

Medicine Cabinets

e.g. Mirrored medicine cabinet, medicine cabinet with light

Quilts

e.g. Baby quilts, patchwork quilts

Dishwashers

e.g. Best dishwashers 2016, miele dishwasher



Fast Growing Mobile Themes²

Decorative Throw Pillows:

Over 85% YoY growth

Kitchen Storage:

Over 85% YoY growth

Coffee Table and End Tables:

Over 80% YoY growth

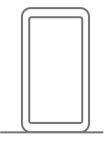
Media and Entertainment Search Trends



What people are searching for on their devices

Themes are relative to overall Media and Entertainment search share by device

Go back to slide



Mobile Themes¹

Movie Tickets

e.g. Regal cinemas, Fandango movies

Latin Music

e.g. Tango, Prince Royce

DVD and Video Rentals

e.g. Redbox near me, videoshop



Computer & Tablet Themes¹

Filmmaking

e.g. Director's Guide to America, filmmaking stuff

Video on Demand

e.g. Amazon Prime video, watch TV online

Blu-Ray Discs

e.g. 4K Blu-Ray, Blu-Ray discs



Fast Growing Mobile Themes²

Comics and Graphic Novels:

Over 55% YoY growth

Sci-Fi and Fantasy Films:

Over 45% YoY growth

Sports Scores and Stats:

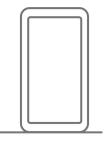
Over 50% YoY growth

Travel Search Trends



What people are searching for on their devices Themes are relative to overall Travel search share by device

Go back to slide



Mobile Themes¹

Car Services and Taxis

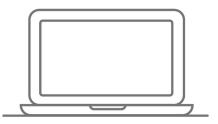
e.g. Taxi service, taxi near me

Destination Activities

e.g. Things to do near me, Six Flags tickets

Dining

e.g. Local restaurants, places to eat near me



Computer & Tablet Themes¹

Travel Insurance

e.g. International health insurance, visitor health insurance

Camping

e.g. Lake Tahoe camping, RV parks in Florida

City and Short Trips

e.g. Day trips from Paris, London to Paris day trip



Fast Growing Mobile Themes²

Travel Insurance

Over 55% YoY growth

Camping

Over 45% YoY growth

Air

Over 40% YoY growth

Methodology Details and Definitions

Methodology Details and Definitions

When reporting smartphone, tablet, and computer usage, additional filters were applied to cleanse the data:

- Tablet and smartphone: Filter out app data that is less than 1 second and greater than 3 hours. The < 1s filter helps remove accidental app opens, and the > 3hrs filter helps remove activity such as Netflix playing while asleep.
- Computer browser: Aggregating the time between URL requests. Upper bound limits are 5 minutes for general URLs, 10 minutes for YouTube, and 30 minutes for video sites such as Netflix.
- All Devices: To be included in the analysis, users have to be part of the opt-in user pool 15 days out of a 28 rolling lookback window.

Metric Definitions:

- Daily average time spent: The average time spent per day by study group.
- Daily average users: The average number of users who performed said activity on mobile, tablet, or computer devices.
- Simultaneous device usage: Users who use computer and tablet/smartphone within one hour time interval at home.