



JANUARY - MARCH 2022



#### ASIA

#### NORTH AMERICA

**EUROPE** 



#### SOUTH AMERICA

#### AFRICA

OCEANIA



Q1 2022 to Q4 2021 Comparisons

#### Top Smartphones

- Globally, the Apple iPhone 11 has the largest global share at 5.06%, the second largest global share belongs to the Apple iPhone XR at 2.36%.
- Dropping off the top smartphone list this quarter is the Apple iPhone XS Max and Apple iPhone XS.

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- Joining the list this quarter is the Samsung Galaxy J2 Prime, the Samsung Galaxy A12, and the Apple iPhone 13 Pro Max.
- None of the Samsung phones are from its premium Galaxy S series.

Top Smartphones	Africa	Asia	Europe	N. America	Oceania	S. America	Global
Apple iPhone 11	1.80%	3.89%	6.32%	7.82%	8.00%	4.32%	5.06%
Apple iPhone 11 Pro	0.46%	1.01%	1.52%	1.21%	2.91%	0.40%	1.00%
Apple iPhone 11 Pro Max	0.89%	1.67%	1.36%	2.14%	3.59%	0.63%	1.36%
Apple iPhone 12	0.51%	1.48%	2.78%	2.72%	4.00%	0.97%	1.97%
Apple iPhone 12 Pro	0.47%	1.49%	1.54%	1.73%	3.41%	0.47%	1.29%
Apple iPhone 12 Pro Max	1.14%	2.58%	1.90%	3.12%	5.03%	0.76%	1.89%
Apple iPhone 13 Pro Max	0.45%	1.41%	0.92%	1.69%	3.02%	0.35%	1.01%
Apple iPhone 6S	0.86%	1.03%	0.93%	1.34%	0.83%	1.25%	0.99%
Apple iPhone 7	1.19%	1.41%	1.91%	2.40%	1.88%	1.75%	1.61%
Apple iPhone 7 Plus	1.44%	1.85%	0.88%	2.17%	1.41%	1.31%	1.44%
Apple iPhone 8	0.66%	0.78%	2.13%	1.76%	2.11%	1.22%	1.34%
Apple iPhone 8 Plus	1.53%	1.40%	1.25%	2.65%	2.22%	1.36%	1.52%
Apple iPhone SE (2020)	0.27%	0.61%	2.05%	1.74%	1.59%	0.80%	1.13%
Apple iPhone X	1.09%	1.52%	1.53%	1.50%	2.55%	0.75%	1.28%
Apple iPhone XR	0.89%	1.57%	2.78%	3.90%	3.88%	1.99%	2.36%
Samsung Galaxy A10	0.69%	0.47%	0.70%	0.39%	0.39%	1.41%	0.62%
Samsung Galaxy A10s	1.28%	0.39%	0.21%	0.67%	0.27%	1.78%	0.58%
Samsung Galaxy A12	1.05%	0.43%	0.94%	0.72%	0.67%	0.89%	0.75%
Samsung Galaxy A21s	1.13%	0.53%	0.98%	0.78%	0.65%	1.66%	0.94%
Samsung Galaxy J2 Prime	1.79%	1.27%	0.09%	0.46%	0.12%	1.16%	0.43%
Xiaomi Redmi Note 8	0.42%	0.61%	0.32%	0.44%	0.12%	1.50%	0.57%
Others	79.99%	72.59%	66.97%	58.65%	51.34%	73.27%	70.86%

## Top Smartphone Trends (2022 Q1 vs. 2021)

- The largest adoption trend belongs to the Apple iPhone 13 Pro Max, gaining 0.88% globally. In N. America, the Apple iPhone 11 gained 1.75%, the largest continent gain.
  - S. America saw the largest drop trend of -6.19% for the Apple iPhone 12 Pro Max.
  - S. America saw a large gain in the "others" meaning non-leading smartphones gained over 35%. Oceania and N. America saw small drops adoptions in the "others" category over -6% and -4% respectively.

Top Smartphone Trends	Africa	Asia	Europe	N. America	Oceania	S. America	Global
Apple iPhone 11	-1.67%	-1.89%	-0.65%	1.75%	-0.47%	-4.54%	-3.08%
Apple iPhone 11 Pro	-0.58%	-0.62%	-0.45%	-0.25%	1.41%	-3.10%	0.14%
Apple iPhone 11 Pro Max	-0.21%	-0.83%	-0.15%	0.43%	1.27%	-4.05%	0.01%
Apple iPhone 12	-0.89%	-1.30%	-0.12%	0.29%	1.21%	-3.85%	0.57%
Apple iPhone 12 Pro	-0.69%	-1.37%	-0.51%	-0.25%	1.03%	-5.17%	0.52%
Apple iPhone 12 Pro Max	-0.50%	-1.38%	-0.11%	0.73%	1.55%	-6.19%	0.46%
Apple iPhone 13 Pro Max	0.30%	0.66%	0.53%	0.85%	1.11%	0.22%	0.88%
Apple iPhone 6S	-1.29%	0.09%	-0.43%	0.22%	-0.91%	0.54%	-1.09%
Apple iPhone 7	-2.17%	-0.14%	-0.70%	0.40%	-0.79%	-0.33%	-1.84%
Apple iPhone 7 Plus	-0.14%	-1.18%	-0.22%	0.35%	-0.63%	-0.56%	-1.03%
Apple iPhone 8	-1.31%	-0.14%	-0.41%	0.09%	0.06%	-1.14%	-1.03%
Apple iPhone 8 Plus	-1.75%	-1.07%	-0.10%	0.83%	0.05%	-1.67%	-1.45%
Apple iPhone SE (2020)	-0.79%	-0.27%	0.10%	0.41%	-0.32%	-0.70%	0.03%
Apple iPhone X	-0.29%	-0.89%	-0.35%	-0.29%	0.38%	-2.82%	-0.25%
Apple iPhone XR	-1.19%	-1.12%	-0.54%	0.83%	-0.57%	-3.29%	-1.99%
Samsung Galaxy A10	0.07%	0.15%	-0.02%	0.08%	0.07%	0.21%	0.00%
Samsung Galaxy A10s	0.08%	0.07%	-0.01%	0.13%	-0.29%	1.59%	-1.03%
Samsung Galaxy A12	0.13%	0.13%	0.19%	-0.14%	0.22%	0.24%	0.10%
Samsung Galaxy A21s	0.07%	0.14%	0.01%	-0.08%	-0.02%	1.17%	-0.54%
Samsung Galaxy J2 Prime	1.23%	1.06%	0.00%	0.10%	0.01%	0.26%	0.13%
Xiaomi Redmi Note 8	0.02%	0.02%	-0.01%	0.02%	0.07%	0.04%	0.02%
Others	10.69%	11.22%	4.31%	-6.65%	-4.68%	35.40%	9.83%

6



#### Global Smartphone OS Versions

- Among global OS versions, Android 11 is the most popular smartphone OS version with 25.02%.
- Among global OS versions, Apple iOS 15.3 is the most popular Apple iOS version with 7.40% share.





Point of Clarification:

Unlike the Global Smartphone OS Versions which is a quarterly average, this is daily data and provides only Apple smartphone usage on the last day of 2022 Q1.

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#### Legacy Definition: iOS before 12, Android before 7

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Point of Clarification: Unlike the Global Smartphone OS Versions which is a quarterly average, this is daily data and provides only Android smartphone usage on the last day of 2022 Q1.



- Android 11 is the top OS version at the end of 2022 Q1.
- Android 10 is the 2<sup>nd</sup> most used OS group in our Android traffic.

# Android Smartphone Operating System Trends



### Form Factor

- Mobile devices continue to eclipse desktop, with only 38.03% of traffic coming from desktop in 2022 Q1.
- Smartphones are the most frequently used mobile devices, with 54.72% usage in 2022 Q1.
- Bots are the 3<sup>rd</sup> leading device with 3.52% share of global traffic this quarter.
- Tablets were in 4<sup>th</sup> place with 2.11% usages with Feature phones behind them at 1.08% in 2022 Q1.



#### **Usage by Form Factor**

## Apple iPhone X to Apple iPhone 13 Smartphone Trends

- Apple iPhone 11 is the top Apple iPhone at the end of 2022 Q1.
- Apple iPhone XR is the 2<sup>nd</sup> most used Apple iPhone at the end of 2022 Q1.
- <u>Apple cut production of the iPhone SE 2022</u> and due to its low numbers from launch.





### Apple iPhone 6 to Apple iPhone 8 Smartphone Trends

- Apple iPhone 8 is the top Apple smartphone under Apple iPhone 8 at the end of 2022 Q1.
- Apple iPhone 7 is the 2<sup>nd</sup> most used Apple smartphone under the Apple iPhone 8 at the end of 2022 Q1.



#### Point of Clarification:

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Unlike the Global Smartphone OS Versions which is a quarterly average, this is daily data and provides only Apple smartphone usage on the last day of 2022 Q1.

## Samsung Galaxy S Series Smartphone Trends

- Samsung Galaxy S21 5G is the top Samsung Galaxy S series smartphone at the end of 2022 Q1.
- Samsung Galaxy S10 is the 2<sup>nd</sup> most used Samsung Galaxy S series smartphone at the end of 2022 Q1.



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*Point of Clarification: Unlike the Global Smartphone OS Versions which is a quarterly average, this is daily data and provides only Samsung smartphone usage on the last day of 2022 Q1 minus the Samsung Galaxy S7 Edge.* 

**5G Ready Adoption** 

## 5G Support vs. Global Use

- The Apple iPhone 12 has a global use of 1.97% and makes up 11.56% of 5G smartphone traffic.
- The Apple iPhone 12 Pro Max has a global use of 1.89% and makes up 11.10% of 5G smartphone traffic.
- The Apple iPhone 12 Pro has a global use of 1.29% and makes up 7.59% of 5G smartphone traffic.

#### **5G Global Support by Percent**



#### Brands Share of 5G Devices

- Apple makes up almost half of the global 5G device market at 49.63%.
- Samsung makes up over 30% of the global 5G device market with 31.71% share.
- Xiaomi makes up 5.50% of the global 5G device market.



#### **Global Percentage of 5G Devices**

**MSRP by Age of Use** 

#### MSRP of Devices by Age

- For the most expensive devices (>\$700), the most popular age is 1-2 years at 2.18%.
- For the medium MSRP device (\$400-\$699), the most popular age was 1-2 years at 16.40%.
- For the least expensive devices (<\$400), the most popular MSRP was 2-3 years at 9.44%.



#### **MSRP and Age of Devices**

#### <\$400 MSRP Devices by Age

- The most popular age in this MSRP (<\$400) was 2-3 years at 23.05%
- The second most popular age in this MSRP (<\$400) was 1-2 years at 23.14%.
- The least popular age in this MSRP (<\$400) was less than 1 year at 7.98%.



#### <\$400 MSRP Devices and Age

### \$400-\$699 MSRP Devices by Age

- The most popular age in this MSRP (\$400-\$699) was 1-2 years at 32.21%
- The second most popular age in this MSRP (\$400-\$699) was 2-3 years at 25.17%.
- The least popular age in this MSRP (\$400-\$699) was 4-5 years at 5.83%.



#### \$400-\$699 MSRP Devices and Age

#### >\$699 MSRP Devices by Age

- The most popular age in this MSRP (>\$699) was 1-2 years at 26.85%
- The second most popular age in this MSRP (>\$699) was 2-3 years at 24.62%.
- The least popular age in this MSRP (>\$699) was 4-5 years at 8.74%.



#### >\$699 MSRP Devices and Age

# **Get a Custom MOVR**

# Get Customized Mobile Data Reports

- Geography: select global, continents, or over 40 countries from developed of emerging markets
- Device Capabilities: select from over 500 device capabilities including form factor, OS, browsers, apps, display & resolution, chipsets, video, and economic information.
- **Time Frame**: analyze trend and make comparisons by selecting the time frame of the report
- Delivery Frequency: select how often the MOVR data delivered, including annual, quarterly, monthly, weekly, or daily
- Contact: <u>sales@scientiamobile.com</u>
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How the Mobile Overview Report is Possible The Mobile Overview Report is Made Possible by WURFL.js Business Edition



With Business Edition, You Get:

- Accurate identification of iPhone and iPad models
- Integrate with <u>Google Analytics</u>
- Over 20 of WURFL's most popular capabilities
- Easy-to-use JavaScript snippet works with ScientiaMobile's cloud-based DDR
- SLA and high reliability
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Get WURFL.js: <u>https://www.scientiamobile.com/products/wurfl-js/</u>

**New Product:** WURFL Microservice Plugin for Logstash Use WURFL Microservice with Elasticsearch, Logstash and Kibana for your Analytics Needs



Run device detection through a microservice purchased via the <u>AWS</u> <u>Marketplace</u>, <u>Azure Marketplace</u>, <u>Google Cloud Platform</u>, or deploy through ScientiaMobile's private <u>Docker</u> repo. Learn more in our blog about how to integrate device information into Logstash. The Microservice will map HTTP requests return the device and browser capabilities. The WURFL device detection filter plugin to enrich event streams with device information



**About this Report** & Resources

#### **Report Specifications**

- Purpose of Report
  - ScientiaMobile publishes MOVR to provide the mobile Web community with timely information on mobile Web device usage.
  - Our goal is to stimulate interest in mobile device trends, device capabilities, and tools for analyzing and managing device fragmentation.
- Sources of Data and Filtering
  - The information in this report is based on a representative sample of a larger data set. The sample size is more than 205 billion requests from April 2014 to end of March 2022.
  - MOVR focuses on mobile devices, consisting of smartphones, tablets, and feature phones.
  - While the data set includes desktops, laptops, smart TVs, game consoles, apps, and robots, we have excluded them, unless otherwise noted.
  - We have used an Equivalent Weighted Sites (EWS) methodology that indexes the traffic at each site and assigns an equal weight to each site.
  - Samples sizes for Africa and Oceania are small enough that we have a low level of confidence that these figures are representative. However, the source data from these continents continues to grow. Over time, we will improve the quality of these figures. In the meantime, we feel that more information is better than less for people looking for insights in these continents.
  - To download the data files supporting MOVR, or subscribe to future publications of MOVR, please visit us at <u>www.scientiamobile.com/movr</u>



#### Definitions

- What is a "hit"? Each time a user visits a Web page and a user agent (UA) is generated and tested by WURFL (through a number of mechanisms), a "hit" is recorded in the ScientiaMobile dataset. All data reported in MOVR reflects hits, not the count of physical devices generating the hit.
- What is a smartphone? A smartphone must meet several criteria: it must be a wireless device, have a touch screen with horizontal resolution greater than or equal to 480px, and not be considered a tablet.
- What is a tablet? Criteria for a tablet include: a wireless device, be marketed as a tablet, and running a mobile or tablet OS. One exception is that a full version of Windows running on a tablet is considered to be a laptop.

## Definitions (continued)

- *What is a feature phone?* It is a wireless device that falls into one of the three categories: classic feature phones, modern feature phones, and old smartphones.
  - Classic feature phone: Typically a bar, slide, or clamshell form factor with limited possibilities to install apps and a proprietary OS. Other criteria include a physical keyboard and a low price range. Examples are Nokia Series 30 and 40 or Motorola Razr devices.
  - Modern feature phone: These phones also have a low price range. They are "smartphone-like", but targeted at the classic feature phone market. They may have a smartphone OS. They borrow features from classic feature phones, such as size or screen size. Examples are Nokia Asha series or Samsung Galaxy Pocket.
  - Old smartphones: These smartphones are older. Classic Blackberry devices and Symbian-based devices fall into this category. More recent devices with a touch screen, but with older hardware or older versions of Android, iOS or Windows Phone also fall into this category.
- What is MNO Traffic? Traffic originating from Mobile Network Operators (MNO). It is defined, in our research method, as the connection type provided by the browser navigator.connection API.

#### About WURFL

- ScientiaMobile uses its WURFL products to collect and analyze the device intelligence contained in the MOVR report. WURFL is a Device Description Repository (DDR) that integrates an API and XML to provide an always-updated source for detecting devices and their capabilities. For more than 10 years, WURFL has been the industry standard for device detection. Today, ScientiaMobile offers a number of WURFL products to match a range of needs, from small developers to large enterprises.
- WURFL OnSite and WURFL InFuze provide businesses with high performance server-side device detection solutions.
- WURFL.js provides front-end developers with access to device detection through JavaScript snippets.
- WURFL InSight provides business intelligence analysts with a table-based device detection tool that will integrate easily with data analysis tools.
- ImageEngine combines mobile device detection with image resizing, image file optimization, and Content Delivery Network (CDN)-type delivery. It provides significantly faster downloads, especially on mobile devices.

### About ScientiaMobile

- ScientiaMobile provides the industry's most accurate and flexible device detection solution, helping customers deliver great web experiences and manage the increasingly fragmented mobile device ecosystem.
   ScientiaMobile sells WURFL, a constantly-updated repository that catalogues thousands of devices and their capabilities and provides access to them via range of API languages. The WURFL framework enables many organizations, including Fortune 500 companies, to effectively design and analyze web experiences for an ever-growing range of smartphones, tablets, smart TVs, and game consoles.
- For more information about ScientiaMobile and its commercial products, please visit us at: <u>www.scientiamobile.com</u>
- <u>WURFL.io</u> offers a number of free tools for device detection and image optimization.
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