BY THE NUMBERS

Understanding the mobile gaming landscape through Unity metrics

September 2015

unity

ABOUT THIS REPORT

As the game development platform with the largest market share, Unity is uniquely positioned to interpret usage data as a means of discovering relevant trends. By sharing this data, our goal is to help game developers better understand the gaming landscape and players' behavior.

The first edition of the By The Numbers report focuses on game install patterns. It includes information about where games made with Unity are played, what devices they're played on, and what operating systems those devices are running.
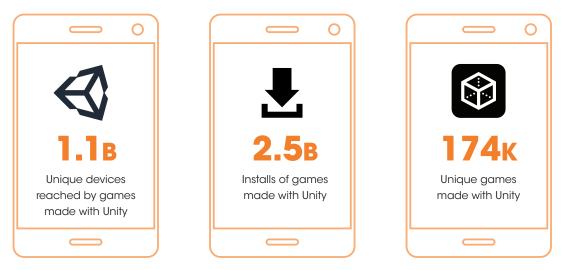
The statistics provided are just a first step towards providing deep insights, benchmarking, and metrics for game developers. In future additions, you can look forward to seeing the most fine-grained game usage data in the industry to help you become even more successful.

MILLIONS OF MOBILE GAMES ARE INSTALLED EVERY DAY

When most games or apps made with Unity are installed, de-identified data is sent, including a unique device identifier, device model, platform, operating system, and country of origin for the device installing the app.

Between April 1 and July 31 2015, 174,183 (174K) unique games or apps made with Unity generated 2,471,221,822 (2.5B) install events, reaching 1,104,635,344 unique devices (1.1B).
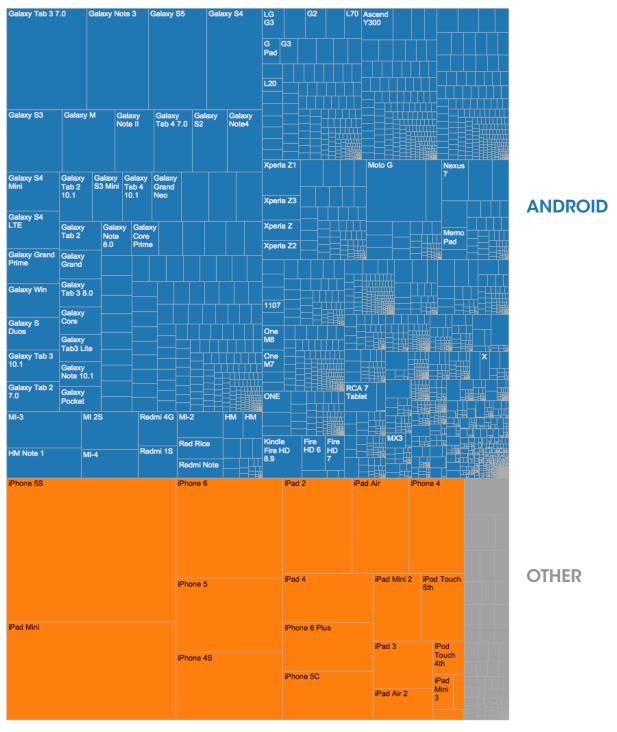
On average, this number of install events represents about 9 million new devices reached every day and nearly 20 million install events per day, providing a vast quantity of data to analyze for trends in installs by platform and by country.

1.1B
Unique devices reached by games made with Unity

2.5B
Installs of games made with Unity

174K
Unique games made with Unity

Between April 1 and July 31, 2015
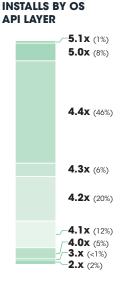
MOBILE PLATFORM DIVERSITY

Globally, 74% of all mobile app installs were initiated on an Android device, with 17% of installs being initiated on iOS devices. The two most popular manufacturers are Apple and Samsung, and their devices account for 54% of mobile app installs.

UNIQUE DEVICES BY OS AND MODEL REACHED BY GAMES MADE WITH UNITY

ANDROID OS

ANDROID APP INSTALLS BY OS API LAYER

- **5.1x** (1%)
- **5.0x** (8%)
- **4.4x** (46%)
- **4.3x** (6%)
- **4.2x** (20%)
- **4.1x** (12%)
- **4.0x** (5%)
- **3.x** (<1%)
- **2.x** (2%)

Globally, 74% of all mobile app installs were initiated on an Android device. These devices run a variety of versions of the Android OS, ranging from Android 2.1 (API 7) to Android 5.1.1 (API 22). The three most common OS versions (Android 4.4 (API 19), 4.2 (API 17) and 4.1 (API 16)) account for 78% of all Android app installs. Just over 92% of all Android app installs were performed on devices running Android 4.1 (API 16) or later.

The majority of Android users are dependent on the update schedules of device manufacturers in order to receive the latest Android releases. As a result, Android devices don't typically run the latest release of the OS. In fact, less than 9% of installs were performed on devices running the latest Android OS (Android 5.x, API 21 or later).

ANDROID DEVICES

The Android landscape is very fragmented. The most popular Android device (the Samsung Galaxy Tab 3.7) only represents 3% of all Android devices. From a manufacturer standpoint, Samsung 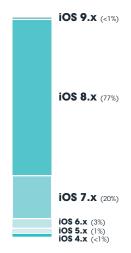accounts for 37% of all Android devices – an overwhelming lead over the next most popular manufacturers: Xiaomi (7%) and LG (5%). Overall, the top 10 manufacturers account for 69% of the total Android market.

TOP ANDROID DEVICE MANUFACTURERS

DEVICE MANUFACTURER	% ANDROID DEVICES	MOST POPULAR MODEL	% OF MFR BRAND
SAMSUNG	37%	Galaxy Tab 3.7	9%
mi	7%	Mi-3	16%
LG	5%	Optimus L5	5%
HUAWEI	5%	Ascend y300	8%
lenovo	4%	Ideatab	9%
SONY	4%	Xperia z1	12%
ALPS	2%	r811	1%
ASUS	2%	Zenphone	17%
MOTOROLA	2%	Moto G	38%
HTC	2%	One M7	6%
Top 10 Total:	**69%**		

APPLE iOS

App Installs by iOS Version

iOS 9.x (<1%)

iOS 8.x (77%)

iOS 7.x (20%)

iOS 6.x (3%)
iOS 5.x (1%)
iOS 4.x (<1%)

Globally, 17% of all mobile app installs were initiated on an iOS device. Devices running on iOS use a range of versions from 4.0 up through iOS 9 beta (the newest iOS OS at the end of the data collection window, used by 0.1% of devices). When compared to Android devices, Apple devices tend to run more recent versions of the OS. 77% of iOS installs occur on devices running 8.0 (released September 2014) or later, and 97% occur on devices running 7.0 (released September 2013) or later.

iOS DEVICES

Apple is the second largest manufacturer of mobile devices, and has the two most popular smartphones in our dataset. iPhones are also the most popular iOS devices accounting for 60% of iOS installs, compared with 36% for the iPad and 4% for the iPod Touch.

The iPhone 6 and the iPhone 5s are the most popular devices with 23% of app installs each. Only 9% of installs occur on the larger iPhone 6 Plus, giving the device a lower market share than the older iPhone 5 and iPhone 4S (with 14% and 13% respectively). The most popular tablets (the iPad Mini and iPad 2) account for 44% of installs on iOS tablets. Both these tablets were released several years ago, but still account for a higher number of installs than newer iPads with Retina displays.

Model	Unique count
iPhone 6 Plus	21,034,964
iPhone 6	51,807,438
iPhone 5S	51,198,236
iPhone 5C	18,171,402
iPhone 5	31,674,592
iPhone 4S	27,841,975
iPhone 4	19,820,877
iPhone 3GS	593,015
Total iPhone	**222,142,499**
Total iPod Touch	**13,546,792**

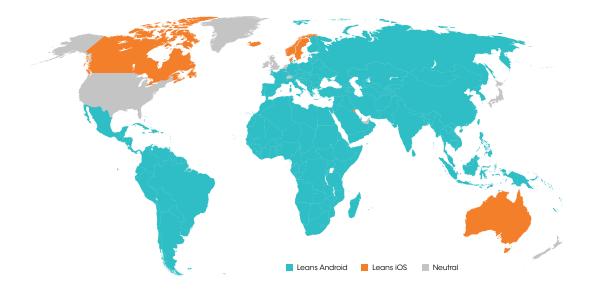| Model	Unique count
iPad Mini 3	3,332,864
iPad Mini 2	13,714,739
iPad Mini	34,300,611
iPad Air 2	8,887,672
iPad Air	21,946,643
iPad 4	16,764,971
iPad 3	10,802,038
iPad 2	24,901,332
iPad	566,637
Total iPad	**135,217,507**

Total Unique iOS Device Count: 370,906,798

GEOGRAPHIC TRENDS

The popularity of Android and iOS devices, and of smartphones generally, varies significantly by region. Because Android has such a significant market share advantage, almost all countries see a majority of app installs occurring on an Android device; however, some countries over-index on iOS app popularity. The top two countries (China and the United States) represent 37% of all installs worldwide. The top five countries account for 50% of global installs, while approximately 75% of installs occur in the top 20 countries.

More than half (54%) of all iOS installs occur in three countries: the United States, China, and Japan; while 71% of all iOS installs take place in the top 10 iOS countries (see below). In countries with the highest volume of iOS installs, iOS is not necessarily the dominant OS.

By comparison, Android installs are more geographically dispersed. The top three countries (China, the United States, and Brazil) only account for 40% of total installs, and only 61% of installs occur in the top 10 countries. Brazil is the major country in which the percentage share of Android devices is highest, while the Scandinavian countries (Denmark, Norway & Sweden) see some of the highest rates of iOS installs.

■ Leans Android   ■ Leans iOS   ■ Neutral

COUNTRIES WITH MOST iOS INSTALLS

Country	Tot. iOS installs	%iOS	%Android
USA	161,215,518	44	48
China	126,106,153	23	63
Japan	52,037,111	56	42
UK	28,833,005	49	41
Canada	17,691,576	60	30
Russia	17,002,995	17	73
Saudi Arabia	13,533,597	32	67
Australia	13,107,509	67	22
France	13,029,616	29	56
Mexico	11,311,474	15	77

COUNTRIES WITH MOST ANDROID INSTALLS

Country	Tot, Android installs	%iOS	%Android
China	341,491,966	23	63
USA	176,827,660	44	48
Brazil	109,851,247	7	83
Russia	74,039,387	17	73
Mexico	56,623,649	15	77
India	45,690,247	7	83
Turkey	45,287,611	15	77
South Korea	40,098,292	11	82
Japan	39,261,982	56	42
Indonesia	34,748,666	6	82

ABOUT UNITY ANALYTICS

Unity Analytics is the nerve center of games built directly into the Unity Engine, giving developers the seamless ability to understand how their game is performing and what they can do to improve user engagement, retention and monetization. Powering Unity Analytics is a powerful data platform capable of capturing billions of events, profiling players across multiple dimensions, and predicting their future behavior.

In the near future, Unity Analytics will provide Unity developers with access to the most comprehensive real-time market data set available in the game industry. This real-time data will provide far deeper insights into games and users, helping Unity developers to become more successful and to build games that players love to play.

For more information on Unity Analytics, or to join the beta program please visit:
http://unity3d.com/services/analytics

For customers who are interested in a comprehensive customized game intelligence package please contact Unity Analytics (analytics@unity3d.com) for details.

ABOUT UNITY TECHNOLOGIES

Unity Technologies is the creator of Unity, a flexible and high-performance end-to-end development platform to create rich interactive 3D and 2D experiences. Unity's powerful engine and editor serve as the foundation to develop beautiful games or apps and easily bring them across multiple platforms: mobile devices, home entertainment systems, personal computers, and embedded systems.

Unity also offers solutions and services for creating games and connecting with audiences including the Unity Asset Store, Unity Cloud Build, Unity Game Performance Reporting, Unity Ads, and Unity Everyplay.

Unity Technologies serves over a million monthly active developers including large publishers, indie studios, students and hobbyists around the globe.

For more information, visit: http://unity3d.com.

ABOUT DATA COLLECTION AND PRIVACY

Unity Analytics is a new service available to mobile game developers aimed at providing greater insights on player behavior.

The game developer may allow Unity to collect certain device properties and the player location when the players installs a mobile game built with Unity software. Unity compiles and publishes certain de-identified, aggregated data to help Unity, mobile game developers and mobile device companies better understand their user base and the devices they use.

Aggregated data for device properties and location was collected from customer applications from April 1, 2015 through July 31, 2015.

Device counts are calculated using a "unique device identifier (UUID)." Different platforms and versions handle the UUID differently, which may result in the same device being counted multiple times due to multiple UUIDs for that device, or a device not being counted at all due to not having a UUID. As a result, iOS device counts may be over-inflated.

For more information on Unity's privacy practices, please review the Unity Privacy Policy:
http://unity3d.com/legal/privacy-policy