# A Mobile Device Overview and Brief History.





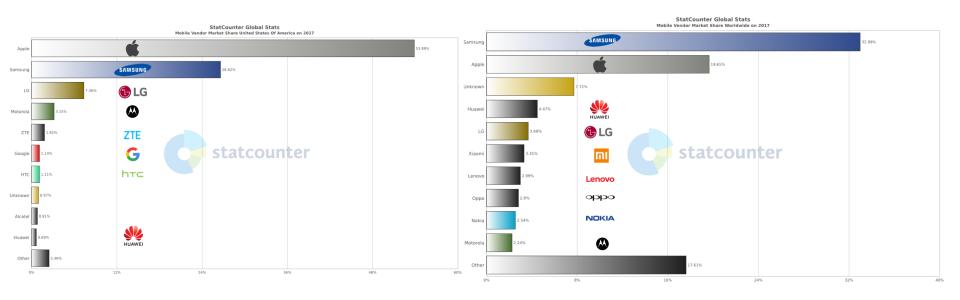








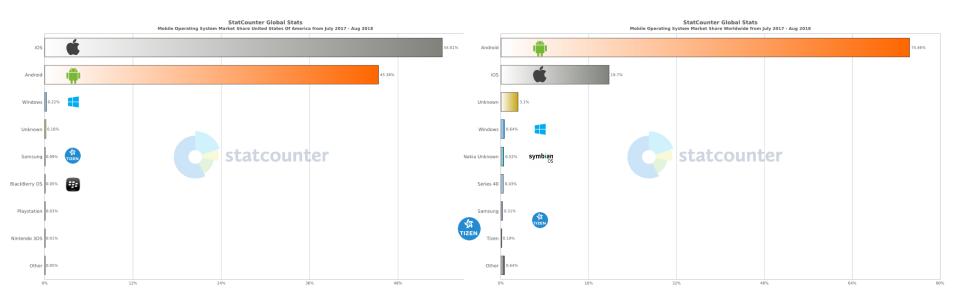
# Mobile Device Market Share US vs. Worldwide



gs.statcounter.com



# Mobile Operating System Market Share US vs. Worldwide



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# Smartphone Platform Market Share: Long-Term Trend Source: comScore MobiLens, U.S., Age 13+, 3 Mo. Avg. Ending Dec 2005 - 3 Mo. Avg. Ending Dec 2016



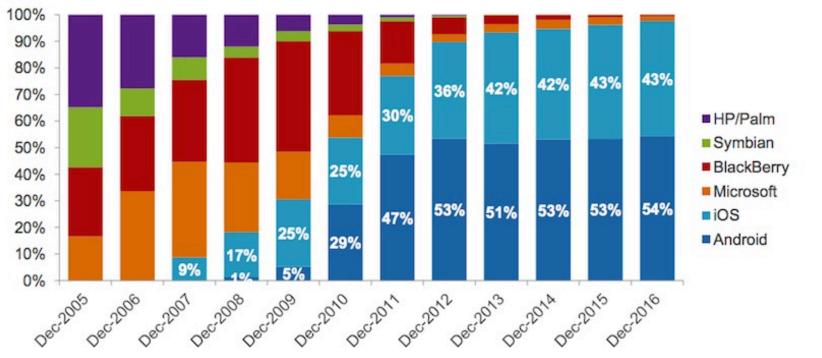




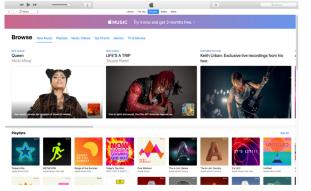








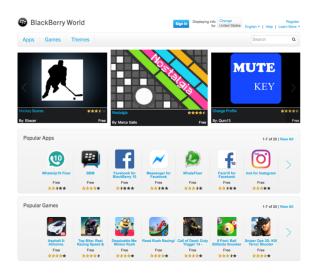
# **Apple iTunes**



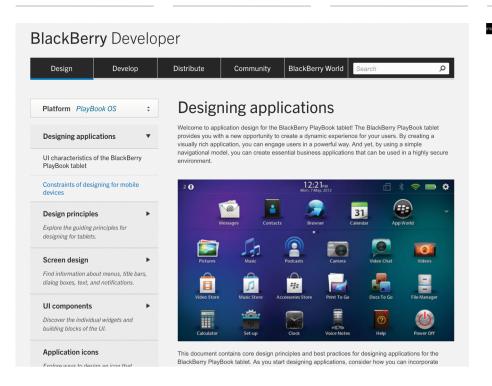
# **Google Play/Android Market**

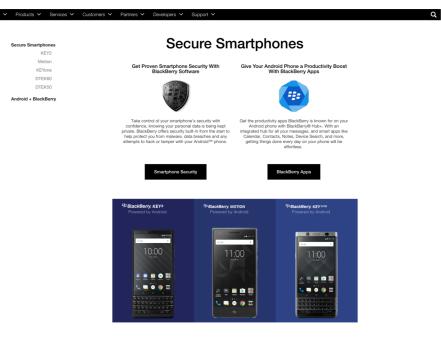


# **BlackBerry World**



#### **Probably not needed to highlight Blackberry**







knowyourmobile.com/nokia

Daria Tsoupikova

Sabine Krauss

The first smartphone, the IBM Simon, has a touchscreen, email and PDA features.



#### 1996

Palm Pilot 1000 personal digital assistant is introduced with the Palm mobile OS.



#### 2000

Symbian, the first modern mobile OS on a smartphone with Ericsson R380 launch.



Microsoft's first Windows CE (Pocket PC) smartphones are introduced.



#### 2002

BlackBerry released its first smartphone.



#### 2007

Apple introduces the iPhone, "mobile phone" and "internet communicator."



OHA releases Android 1.0 with the HTC Dream (T-Mobile G1) as the first Android phone.



#### 2009

Palm introduces webOS with the Palm Pre. By 2012 webOS devices were no longer sold.



#### 2009

Samsung introduces Samsung S8500 with Bada OS



Windows Phone OS phones are released but are not compatible with the previous Windows Mobile OS.



#### 2011

MeeGo the first mobile Linux, (Maemo and Moblin) on Nokia N9, a collaboration of Nokia, Intel and Linux Foundation.



#### 2012

The Lenovo K800 will be the first Intel powered Smartphone (Android OS).



It all started with Steve Jobs' direction that Apple Inc. engineers investigate touchscreens.

The Newton MessagePad was an early handheld device manufactured by Apple in the mid-1990s.

Some of its concepts and functions have been incorporated into the iPhone.



# **January 9, 2007**

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## June 29, 2007

the first iPhone was released and was sold exclusively with AT&T contracts in the United States.

On February 10, 2011, the Verizon iPhone went on sale.

T-Mobile USA's inability to provide the iPhone to customers raised its subscription churn rate, and contributed to parent Deutsche Telekom's decision to sell it to AT&T in March 2011.

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# **July 1, 2007**

it was reported that Apple paid at least US \$1 million to Michael Kovatch for the transfer of the iPhone.com domain name.

Kovatch registered the domain in 1995.

In total, Apple has sold more than one billion iPhones worldwide from 2007 to 2017.

The 10th anniversary iPhone release iPhone 8 - 2017 glass and stainless steel redesign, bezel-less OLED display, facial recognition, updates to 3D Touch, improved waterproofing, wireless charging, and more



https://twitter.com/techunboxin/status/937250671899820032



# The Sensors That Make the iPhone vary per device type and generation.

ifixit.com/

# **Proximity sensor**

This sensor can determine how close the iPhone is to your face.

This sensor is what helps the iPhone turn off its screen automatically whenever you hold the phone up to your ear for a phone call.

This feature is necessary to prevent accidental button clicks on the side of your head when talking.

Time-of-flight sensor
a new type of proximity
sensor on the front side of the phone, one that also acts as an "accurate rangefinder for the selfie camera."

Motion sensor/acceleror
This sensor enables the touch, iPad, or iPhone's screen to automatically switch from landscape to portrait modes and back

Motion sensor/accelerometer
This sensor enables the iPod
touch, iPad, or iPhone's
screen to automatically
switch from landscape to
portrait modes and back
again based on whether
you're holding the phone up
and down or sideways. This
sensor is also present on the

iPad.

# **Ambient Light sensor**

This sensor can determine how much light is available in the area surrounding the iPhone, iPod touch, and iPad and automatically adjust the brightness of the screen in order to conserve battery life.

## **Moisture sensor**

The devices also contain a hardware-specific sensor, though this one isn't related to the interface and accessible through iOS.

The water sensor is a little red tab that appears in the dock connector after the phone has been submerged in water. It can also appear as a red dot in the headphone jack.

Check for this indicator to make sure a used device wasn't damaged by water.

# **Gyroscope**

Starting with the iPhone 4, 4th gen. iPod touch, and iPad 2 there's another sensor: a three-axis gyroscope.

When combining the gyroscope with the accelerometer, this combo gives these devices six axes on which it can operate. This capability is designed to make them more sensitive, responsive and powerful for gaming.

# **Compass**

All iPhone models starting with the iPhone 3GS also have a compass built into them. This sensor is used with the device's GPS and other location awareness features to help determine your iPhone's location, which direction it's facing, and how to get you where you're going.

#### **Barometer**

Barometers assess air pressure to help, in part, to determine altitude.

## Touch ID

A thumbprint sensor embedded with the Home button allows for biometric access to the device and application-level security.

#### **AND NOW**

## Face ID

New with the iPhone X, Face ID uses a 3D camera to identify a person's face to provide secure authentication to both the device and to services including Apple Pay.

# Design a mobile application UI/UX.



# Program for the device (iOS, Android etc.).



# Acceptance by the distributor (Apple/Google).



# **THEN**

Storefront market release (iTunes, Google Play, etc.)

grahamtodman.co.uk/blog/

learnappmaking.com

# What's next?