

Global Gadgets (AAPL, MSFT, GOOG)

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Agenda: Global Gadgets

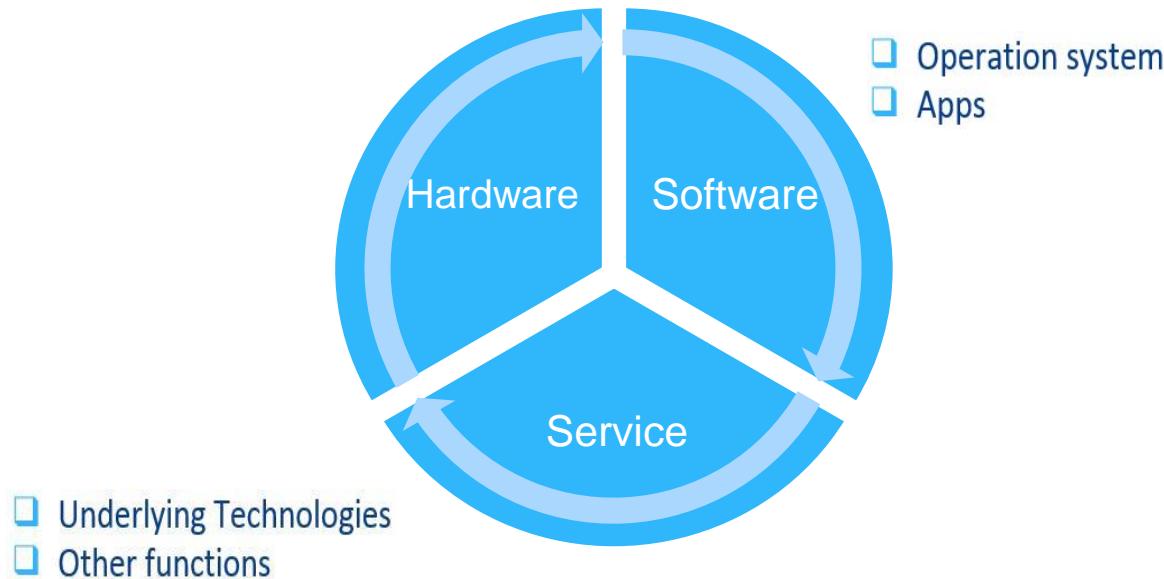
- Industry Overview
- Apple
- Google
- Microsoft
- Conclusion

What are Gadgets?

- Gadgets are small technological objects such as devices and tools that have multiple functions
- Enhances convenience and productivity in daily life
- “Smart”= multi-purpose, multi-tasking
- For work, entertainment, or sense of style
- Benefits that gadgets provide are through hardware, software, and services

Global Gadgets

- Profit relies on gadget sales and service, with the support of software, including OS and apps

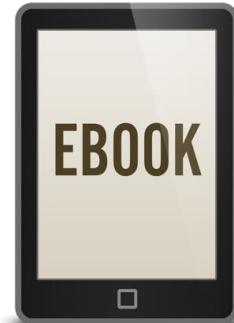


Gadgets: Hardware

Popular Consumer Electronics

Devices that have proven to be useful and have substantially embedded into daily life

- PCs
- Smart phones
- Tablets
- E-book readers



Novelty

Tools with features that change or will change the way users conduct daily activities

- Smart watch
- Smart wristbands
- Google glasses
- Virtual reality
- Virtual assistant



Gadgets: Software & Service

Software & Apps

- Operation System
- Apps/App Stores
 - Apple's App Store/Google Play
- Third-party contents
- Online payment
- Apple Pay, AliPay, Wechat Pay
- E-commerce



Service

- Advertising
- Telecommunication service
- Open source/Closed Environment
- Internet
- Wireless connection/Mobile networking
- Streaming service



Windows 10



Gadget Industry Overview: Structure

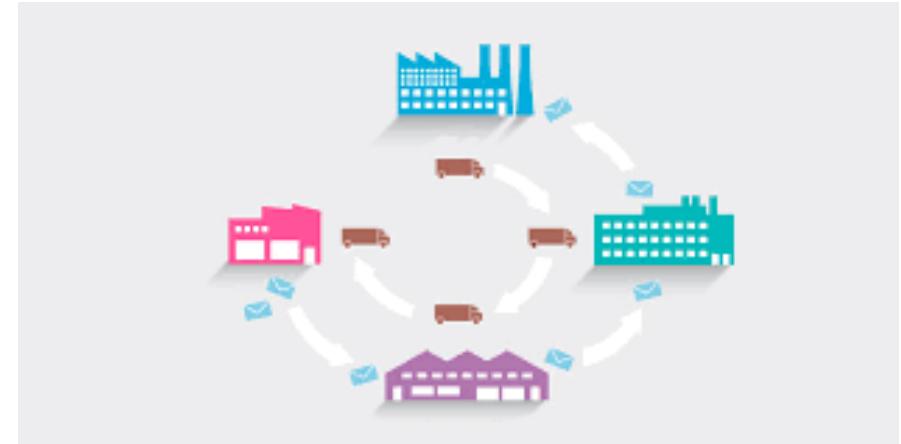
- The industry employs:
 - Engineers
 - Designers
 - Marketers
 - Salespeople
 - Customer service reps
 - Finance personnel



to continually improve familiar products and come up with the next big must-have gadgets

Gadget Industry Overview: Structure

- Manufacturing of the products is done in low labor-cost locations
- Involves multi-players in industry's value chain:
 - Supplies for parts and materials
 - Tech integration and developing
 - Manufacturing
 - Marketing
- A mix of traditional industries:
 - Telecommunications
 - Computer hardware
 - Consumer electronics



Gadget Industry Overview: Trend

Convergence

- Players in the consumer electronics, computer hardware, and telecommunication sectors are increasingly finding themselves competing head-to-head
- Turmoil, in the form of mergers and acquisitions and fluctuations in profitability, is likely to result in each of these industries as time passes

Quality advancement

- Continuous technology advancements
- Technology standards keep increasing

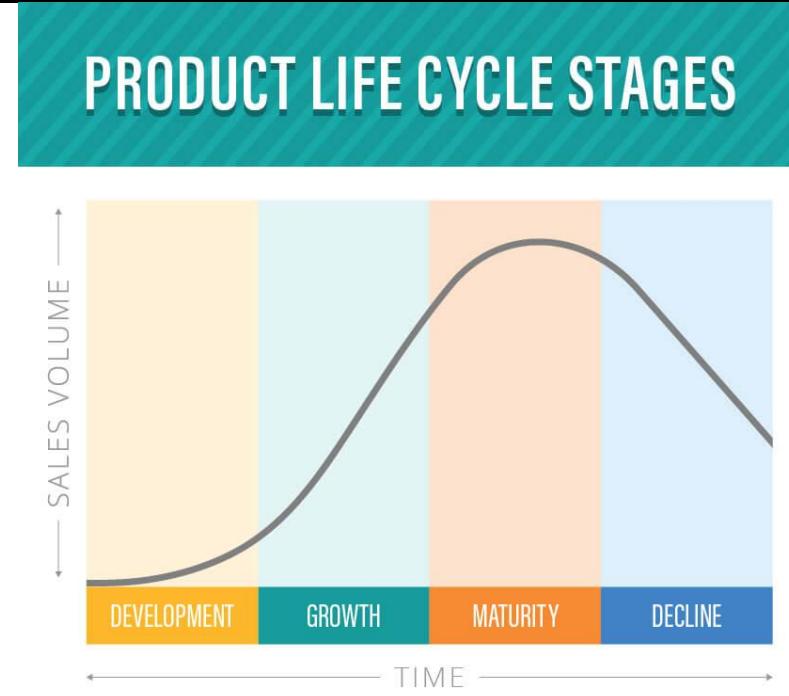


Today's Gadget Industry

- Part of the consumer electronics industry
- Exciting new developments in recent years at a rapid pace
- It is continually growing and evolving
- Firms produce similar products and services creating high competition

Challenges

- Large operating margins
- High capital expenditure
- Shortening product life cycle
- Managing a global supply chain
- Dynamic industry that is rapidly changing



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Competition

- Market dominated by small number of very large companies
- Profits are extremely high
- Rapid change in market shares



DIGITAL AROUND THE WORLD IN 2019

THE ESSENTIAL HEADLINE DATA YOU NEED TO UNDERSTAND GLOBAL MOBILE, INTERNET, AND SOCIAL MEDIA USE



SOURCE: PC POPULATION: UNITED NATIONS; U.S. CENSUS BUREAU; MOBILE: GSMA INTELLIGENCE; INTERNET: INTERNET WORLD STATISTICS; (1) WORLD BANK; (2) CROWD FUNDING; (3) EBU/STAT; (4) CAGLIO GOVERNMENT BODIES AND REGULATORY AUTHORITIES; (5) DEPARTMENT OF MEDIA, CRO; REPORTS IN REPUTABLE MEDIA; (6) SOCIAL MEDIA PLATFORMS' SELF-SERVE ADVERTISING GROWTH; (7) PRESS RELEASES AND INVESTOR EARNINGS ANNOUNCEMENTS; (8) SOCIAL MEDIA REPORTS; (9) GSMA; (10) AGENCE; (11) ROSETTE (ALL LATEST AVAILABLE DATA IN JANUARY 2019)

JAN
2019

ANNUAL DIGITAL GROWTH

THE YEAR-ON-YEAR CHANGE IN KEY STATISTICAL INDICATORS

TOTAL
POPULATION



+1.1%

JAN 2018 – JAN 2019

+84 MILLION

UNIQUE
MOBILE USERS



+2.0%

JAN 2018 – JAN 2019

+100 MILLION

INTERNET
USERS



+9.1%

JAN 2018 – JAN 2019

+367 MILLION

ACTIVE SOCIAL
MEDIA USERS



+9.0%

JAN 2018 – JAN 2019

+288 MILLION

MOBILE SOCIAL
MEDIA USERS



+10%

JAN 2018 – JAN 2019

+297 MILLION

SOURCES: POPULATION: UNITED NATIONS; U.S. CENSUS BUREAU; MOBILE: GSMA INTELLIGENCE; INTERNET: INTERNETSTATS; IAB; WORLD BANK; CRAWLED; FACEBOOK; BROWSE; ICANN; GOVERNMENT BODIES AND REGULATORY AUTHORITIES; MEDIAMINT; COM; REPORTS IN REPUTABLE MEDIA; SOCIAL MEDIA: PLATFORMS' SELF-SERVE ADVERTISING TOOLS; PRESS RELEASES AND INVESTOR EARNINGS ANNOUNCEMENTS; ARAB SOCIAL MEDIA REPORT; TECHBASE; NIO AG HAG; ROBERT (ALL LATEST AVAILABLE DATA IN JANUARY 2019).

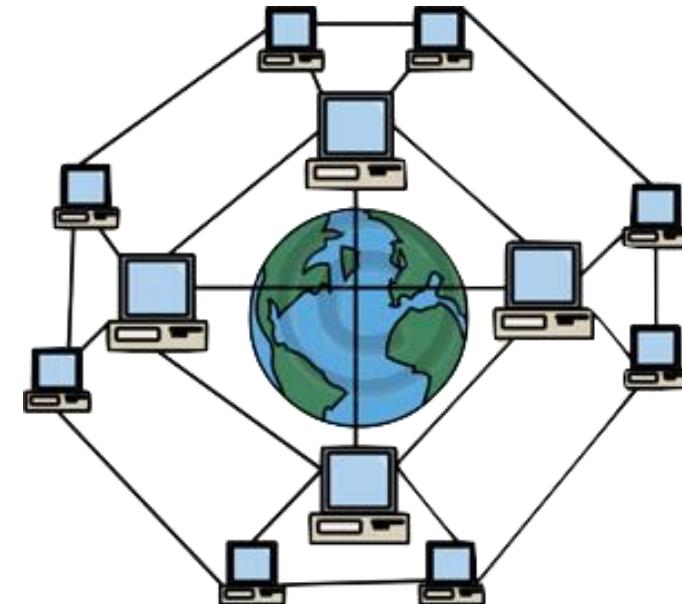
Main Aspects of the Industry

- Internet
- Computers
- Smartphones
- Tablets
- Smart watches
- Operating Systems
- Cloud Computing
- App Stores
- Virtual Reality
- Virtual Assistants
- Smart Cars



The Internet

A global network connecting billions of people online through which communication and other various activities occur



Internet History

1969 The original Internet (US Dept. of Defense)

1969 First message sent from UCLA to SRI

1990 Archie, the first search engine

1991 Internet available for commercial use

1994-95 Yahoo!, Amazon, eBay

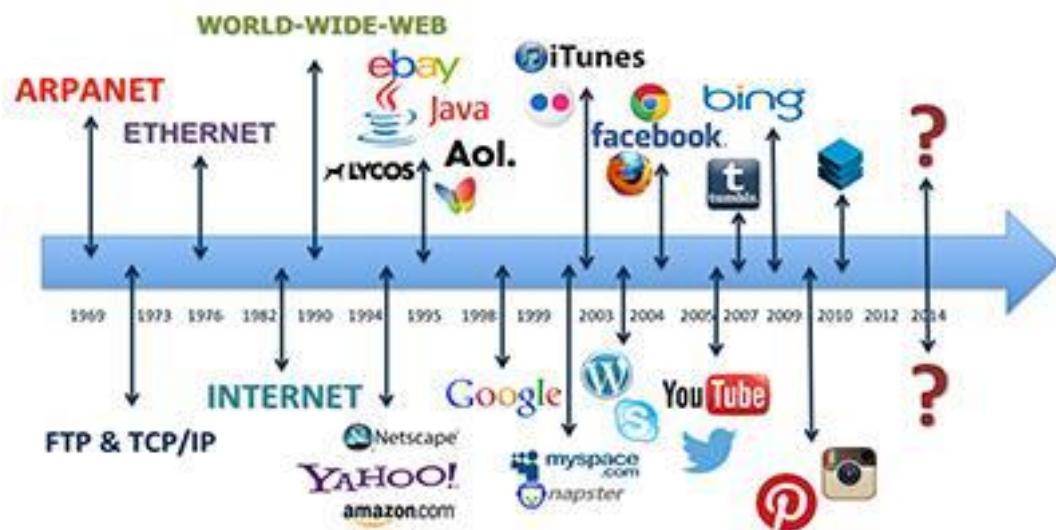
1998 Google search engine

2004 Facebook

2005 YouTube and Reddit

2006 Twitter

2010 Instagram



INTERNET USE: DEVICE PERSPECTIVE

BASED ON ACTIVE INTERNET USER DATA, AND ACTIVE USE OF INTERNET-POWERED MOBILE SERVICES

TOTAL NUMBER
OF ACTIVE
INTERNET USERS



4.388
BILLION

INTERNET USERS AS
A PERCENTAGE OF
TOTAL POPULATION



57%

TOTAL NUMBER
OF ACTIVE MOBILE
INTERNET USERS



3.986
BILLION

MOBILE INTERNET USERS
AS A PERCENTAGE
OF TOTAL POPULATION



52%

SOURCES: INTERNET WORLD STATS (1); WORLD BANK; GAWA (GLOBE ACTIVE WEB USERS); LOCAL GOVERNMENT BODIES; AND REGULATORY AUTHORITIES; MEGASWITCH ADVERTISING REPORTS; IN REPUTABLE MEDIA. **MOBILE SHARE DATA:** A COMBINATION OF DATA FROM GLOBE SWISH INDEX (Q2 & Q3 2018) AND DEXTERA (LOLATED DATA FROM THE SELF-SERVE ADVERTISING TOOLS OF VARIOUS SOCIAL NETWORKS) (JANUARY 2019). DATA FROM GLOBE SWISH INDEX REPRESENT THE FINDINGS OF A BROAD SURVEY OF INTERNET USERS AGED 16-64.

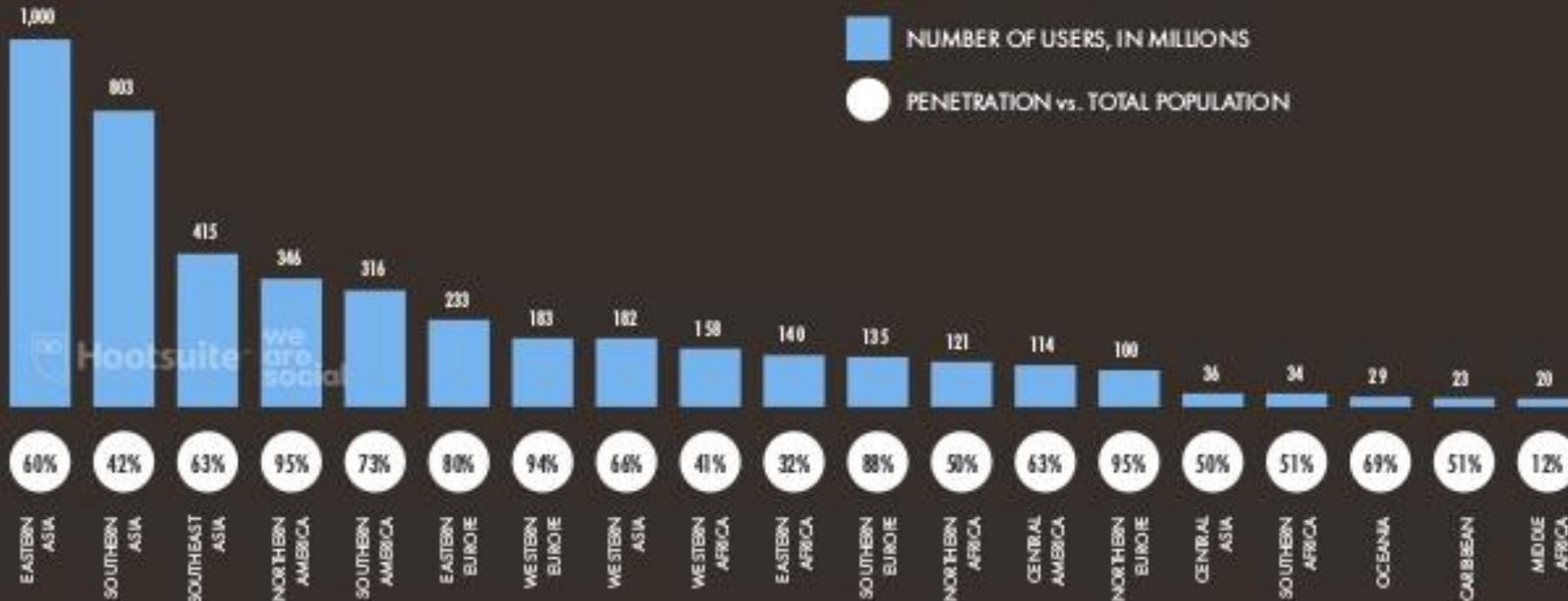


Hootsuite
we
are
social

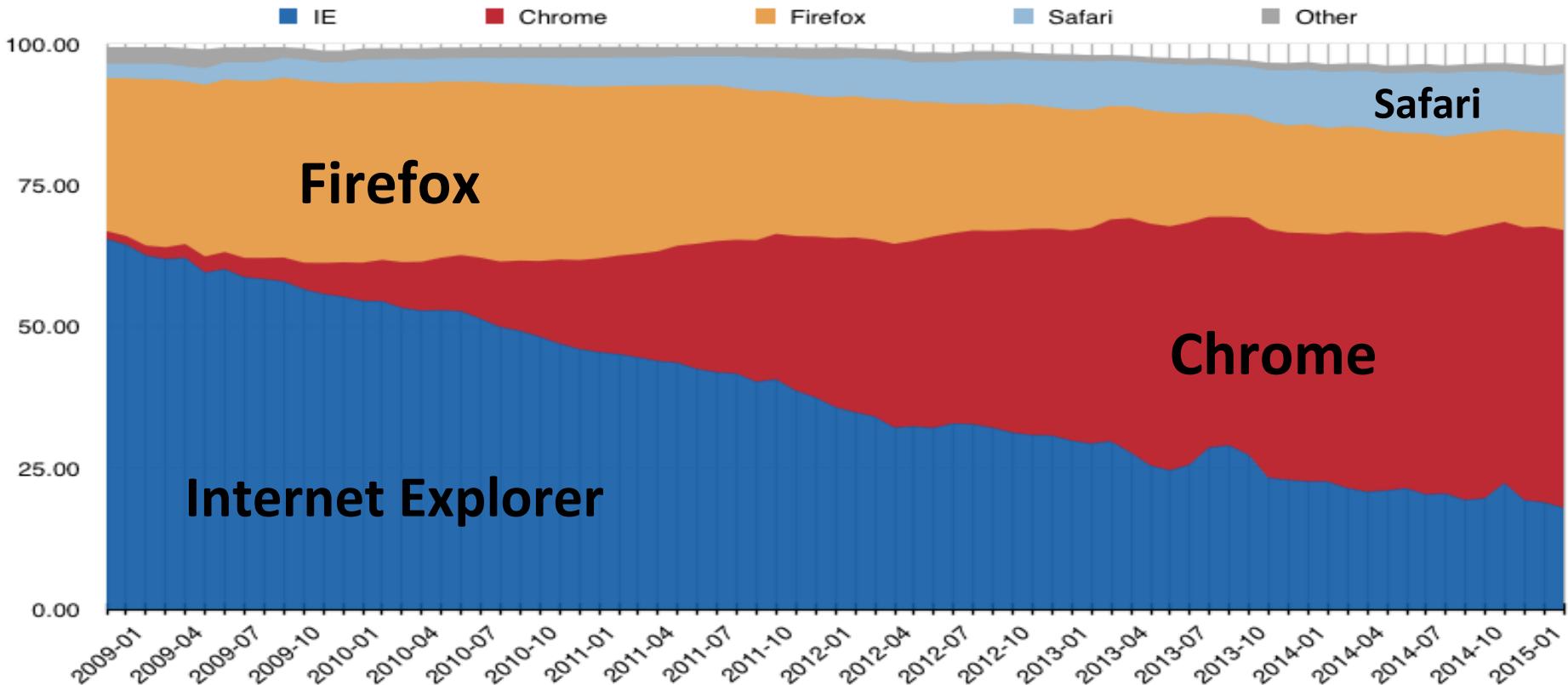
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INTERNET USE: REGIONAL OVERVIEW

INTERNET USERS IN MILLIONS, AND INTERNET PENETRATION vs. TOTAL POPULATION, BY GLOBAL REGION



Share of Users on Internet Platforms



Computers

A device which can do a multitude of tasks ranging from processing and storing data to, doing set tasks based on the software it is operating on.

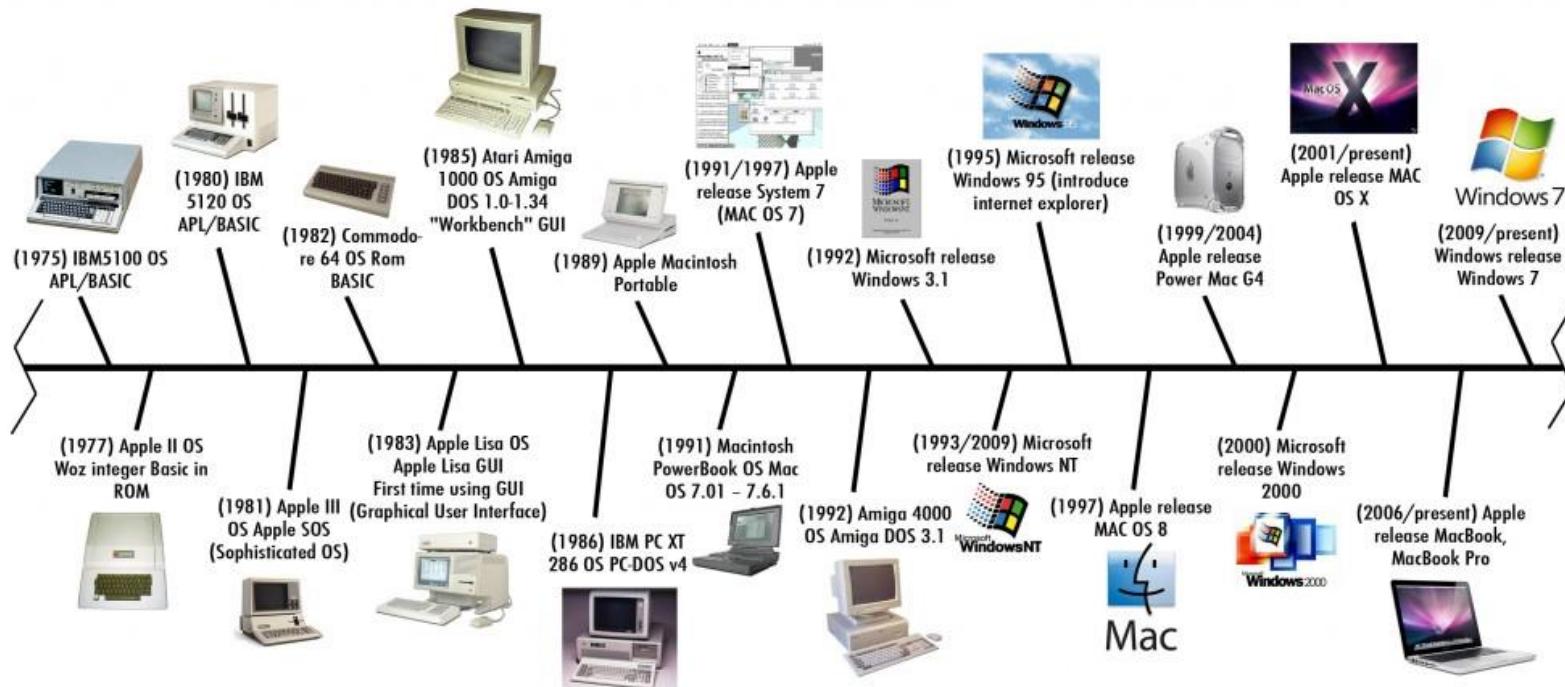


Computer History

- 1936** First freely programmable computer
- 1951** First commercial computer released
- 1974** First consumer computers (IBM)
- 1976** Apple I and II
- 1984** Apple Macintosh
- 1985** Microsoft Windows



Computer Timeline



Smartphones

What is a Smartphone?

- All in one device that can be used as a cell phone and has computing and personal digital assistant functions
- Variety of applications available
- High speed data access
- Multimedia



Product	Google Pixel 3a	Google Pixel 4	OnePlus 7 Pro	Samsung Galaxy S10e	Alcatel Go Flip 3	Motorola Moto G7 Power	Apple iPhone 11 Pro	BlackBerry Key2 LE	Samsung Galaxy Note 10+	Apple iPhone 8
										
Best For	Overall Value	Android Fans	Power for the Price	Friendly Form Factor	WhatsApp and Texting	Two-Day Battery Life	Shutterbugs	A Physical Keyboard	Writers, and Artists	Budget iOS Buyers
Operating System as Tested	Android 9.0	Android 10	Android 9.0	Android 9.0	Other	Android 9.0	iOS 13	Android 8.1	Android 9.0	iOS 12
CPU	Qualcomm Snapdragon 670	Qualcomm Snapdragon 855	Qualcomm Snapdragon 855	Qualcomm Snapdragon 855	Qualcomm Snapdragon 210	Qualcomm Snapdragon 632	Apple A13 Bionic	Qualcomm Snapdragon 636	Qualcomm Snapdragon 855	Apple A11
Processor Speed	2.0 GHz	2.84 GHz	2.8 GHz	2.8 GHz	1.1 GHz	1.8 GHz	2.65 GHz	1.8 GHz	2.8 GHz	2.4 GHz
Dimensions	6.0 by 2.8 by 0.3 inches	5.7 by 2.7 by 0.3 inches	6.4 by 2.99 by 0.34 inches	5.6 by 2.75 by 0.31 inches	4.13 by 2.09 by 0.75 inches	6.28 by 2.99 by 0.37 inches	5.67 by 2.81 by 0.32 inches	5.9 by 2.83 by 0.33 inches	3.03 by 6.38 by 0.31 inches	5.45 by 2.65 by 0.29 inches
Screen Size	5.6 inches	5.7 inches	6.67 inches	5.8 inches	2.8 inches	6.2 inches	5.8 inches	4.5 inches	6.8 inches	4.7 inches
Screen Resolution	2,220 by 1,080 pixels	2,280 by 1,080 pixels	3,120 by 1,440 pixels	2,280 by 1,080 pixels	320 by 240 pixels	1,520 by 720 pixels	2,436 by 1,125 pixels	1,620 by 1,080 pixels	3,040 by 1,440 pixels	1,334 by 750 pixels
Camera Resolution	12.2MP Rear/8MP Front-facing	12MP, 16MP Rear / 8MP Front-facing	48MP, 16MP, 8MP Rear/16MP Front-facing	12MP, 16MP Rear/10MP Front-facing	2MP	12MP Rear/8MP Front-facing	12MP, 12MP Rear/12MP Front-facing	13MP, 5MP Rear/8MP Front-facing	16MP, 12MP, 12MP Front-facing	12MP Rear, 7MP Front-facing
Battery Life (As Tested)	9 hours, 22 minutes (Wi-Fi video streaming)	10 hours, 2 minutes (Wi-Fi video streaming)	11 hours, 37 minutes (Wi-Fi video streaming)	11 hours, 42 minutes (Wi-Fi video streaming)	7 hours, 48 minutes (talk time)	14 hours, 29 minutes (Wi-Fi video streaming)	7 hours, 13 minutes (Wi-Fi video streaming)	8 hours, 15 minutes (Wi-Fi video streaming)	12 hours, 10 minutes (Wi-Fi video streaming)	6 hours, 25 minutes (LTE video streaming)

Mobile Phone History

- 1973** Motorola cell phone created
- 1973** First cell phone call made by Martin Cooper (April 3)
- 1983** First cell phone available to consumers
- 1994** First smartphone
- 1999** First mobile watch phone
- 2001** First Commercial 3G Network
- 2007** First iPhone released
- 2008** First Android phone released
- 2009** First Commercial 4G Network
- 2010** First LTE Network
- 2013** First Smart Watch



Broadband vs Regular Phone Connection

Broadband

Wireless internet access

- Nearly all 2G and 3G phones are broadband

Regular internet connection

Wired internet access

More common in underdeveloped countries



4G/LTE Networks

- Speeds of 1 Gbps when stationary
- 100 MB/s when mobile
- However this standard is so high that no commercialized standard actually meets them hence why we have LTE networks
 - LTE is part of this generation



5G Networks

- Targets high data rate: 20Gbps
- Reduces latency 1ms
- Energy saving
- higher system capacity
- Estimated at 15% - 50% faster



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MOBILE CONNECTIVITY BY DEVICE

BASED ON MOBILE CONNECTIONS* ASSOCIATED WITH VARIOUS KINDS OF MOBILE DEVICE

MOBILE CONNECTIONS*
ASSOCIATED WITH
SMARTPHONES



5.453
BILLION

SMARTPHONE
CONNECTIONS vs.
TOTAL CONNECTIONS*



67%

MOBILE CONNECTIONS*
ASSOCIATED WITH
FEATURE PHONES



2.444
BILLION

FEATURE PHONE
CONNECTIONS vs.
TOTAL CONNECTIONS*



30%

SOURCE: ERICSSON MOBILITY VISUALIZER (ACCESSED JANUARY 2019). FIGURES REFERENCE REPORTED DATA FOR 2019. *NOTE: TOTAL CONNECTIONS ALSO INCLUDE APPROXIMATELY 270 MILLION MOBILE CONNECTIONS (3.3% OF THE TOTAL) USED BY MOBILE PCs, TABLETS, AND ROUTER DEVICES. ADVISORY: ERICSSON REPORTS A DIFFERENT NUMBER FOR TOTAL GLOBAL CONNECTIONS COMPARED TO THE GSMA INTELLIGENCE FIGURES WE CITE ELSEWHERE IN THIS REPORT, SO FIGURES WILL NOT BE DIRECTLY COMPARABLE.

MOBILE CONNECTIONS BY TYPE

BASED ON THE NUMBER OF CELLULAR CONNECTIONS (NOTE: NOT UNIQUE INDIVIDUALS)

TOTAL NUMBER
OF MOBILE
CONNECTIONS



8.842
BILLION

MOBILE CONNECTIONS
AS A PERCENTAGE OF
TOTAL POPULATION



115%

PERCENTAGE OF
MOBILE CONNECTIONS
THAT ARE PRE-PAID



75%

PERCENTAGE OF
MOBILE CONNECTIONS
THAT ARE POST-PAID



25%

PERCENTAGE OF MOBILE
CONNECTIONS THAT ARE
BROADBAND (3G & 4G)



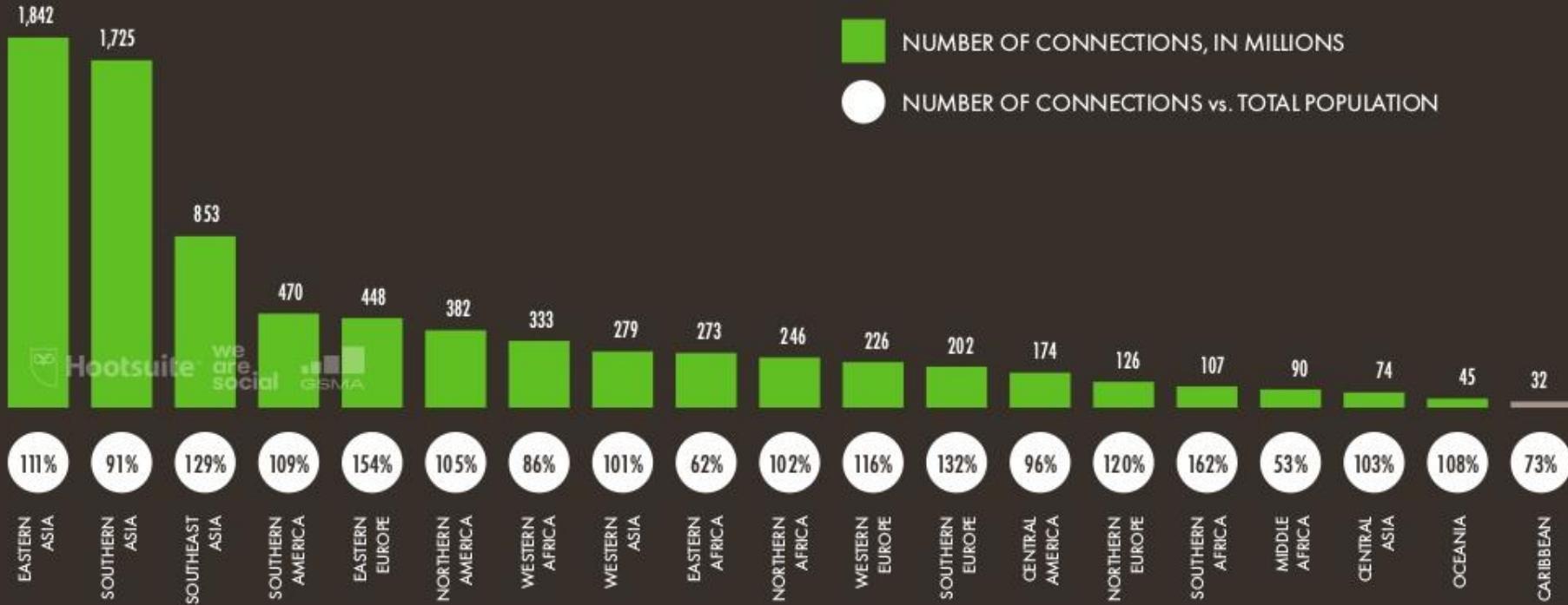
71%

SOURCE: GSMA INTELLIGENCE (Q4 2018 AND JANUARY 2019). **NOTE:** THE FIGURE FOR TOTAL MOBILE CONNECTIONS QUOTED HERE ALSO INCLUDES IOT CELLULAR CONNECTIONS.
ADVISORY: GSMA INTELLIGENCE HAS REVISED ITS DATA SINCE OUR DIGITAL 2018 REPORTS, SO THE NUMBERS MAY NOT BE DIRECTLY COMPARABLE TO THOSE WE PUBLISHED IN LAST YEAR'S REPORTS.

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MOBILE CONNECTIVITY: REGIONAL OVERVIEW

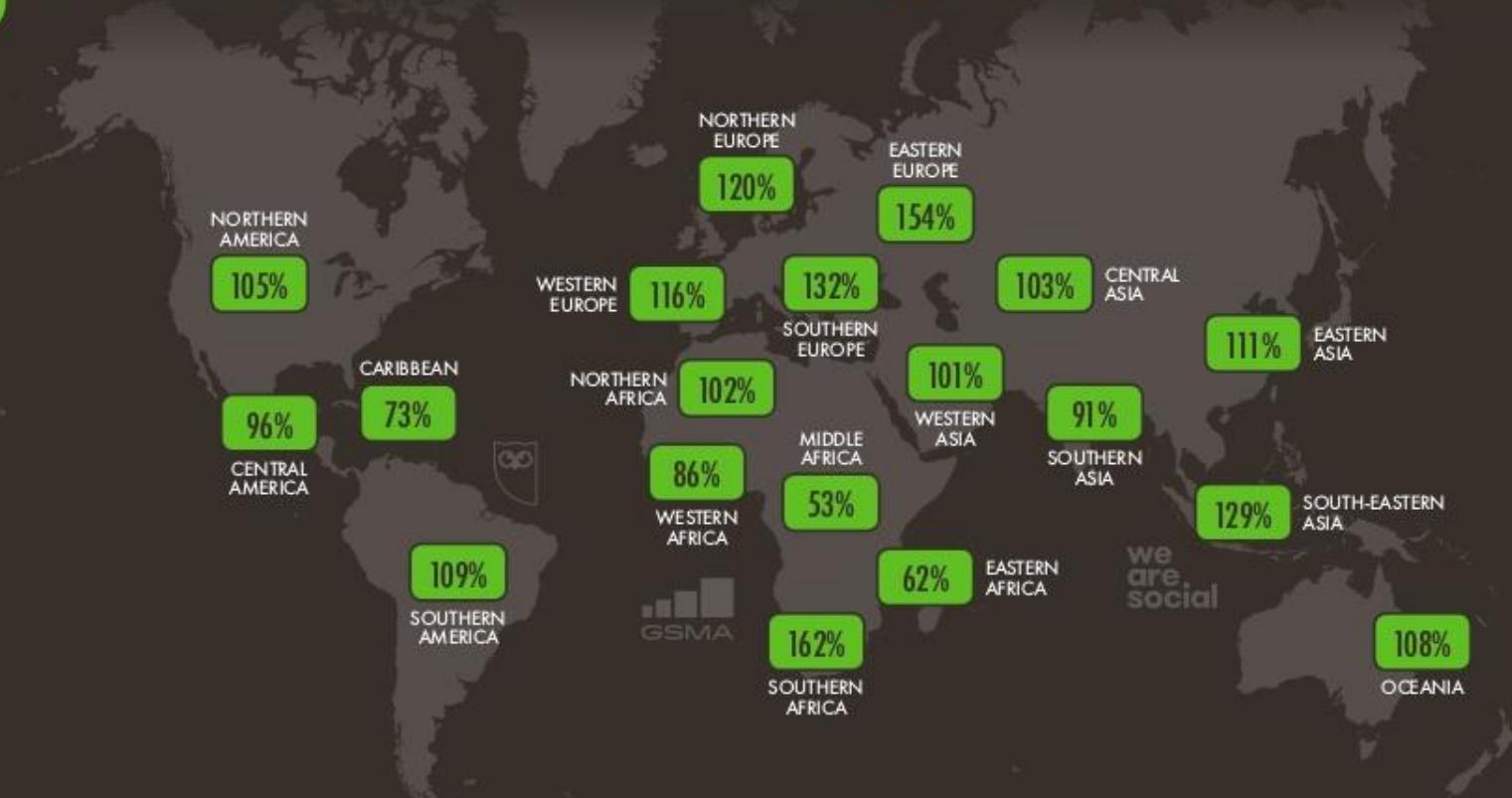
MOBILE CONNECTIONS (IN MILLIONS), AND MOBILE CONNECTIONS AS A PERCENTAGE OF TOTAL POPULATION, BY REGION



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MOBILE CONNECTIVITY BY REGION

THE NUMBER OF MOBILE CONNECTIONS COMPARED TO TOTAL POPULATION (NOTE: NOT UNIQUE USERS)

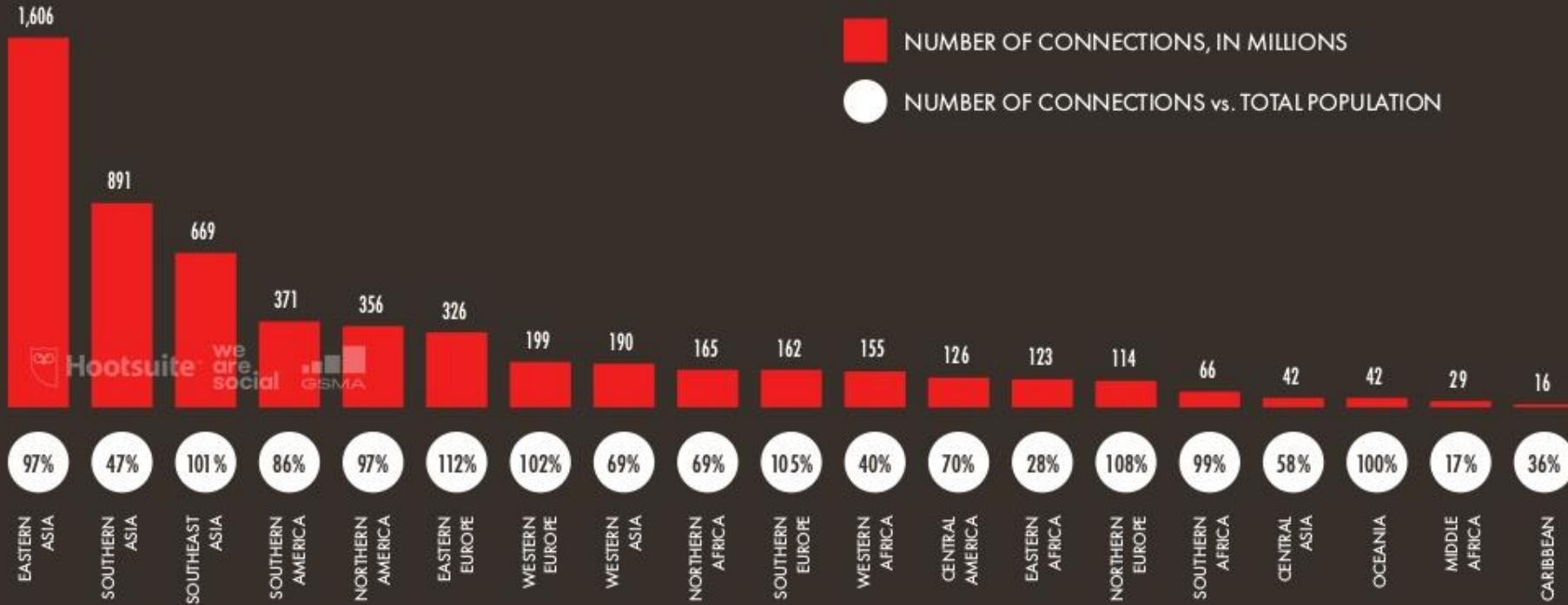


SOURCE: GSMA INTELLIGENCE (Q4 2018); KEPiOS ANALYSIS. NOTES: FIGURES ARE BASED ON COMPARISONS TO TOTAL POPULATION, REGARDLESS OF AGE. ADVISORY: MOBILE CONNECTIONS DO NOT REPRESENT UNIQUE INDIVIDUALS, SO FIGURES OVER 100% INDICATE MULTIPLE MOBILE SUBSCRIPTIONS PER PERSON. REGIONS AS DEFINED BY THE UNITED NATIONS GEOSCHEME.

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MOBILE BROADBAND: REGIONAL OVERVIEW

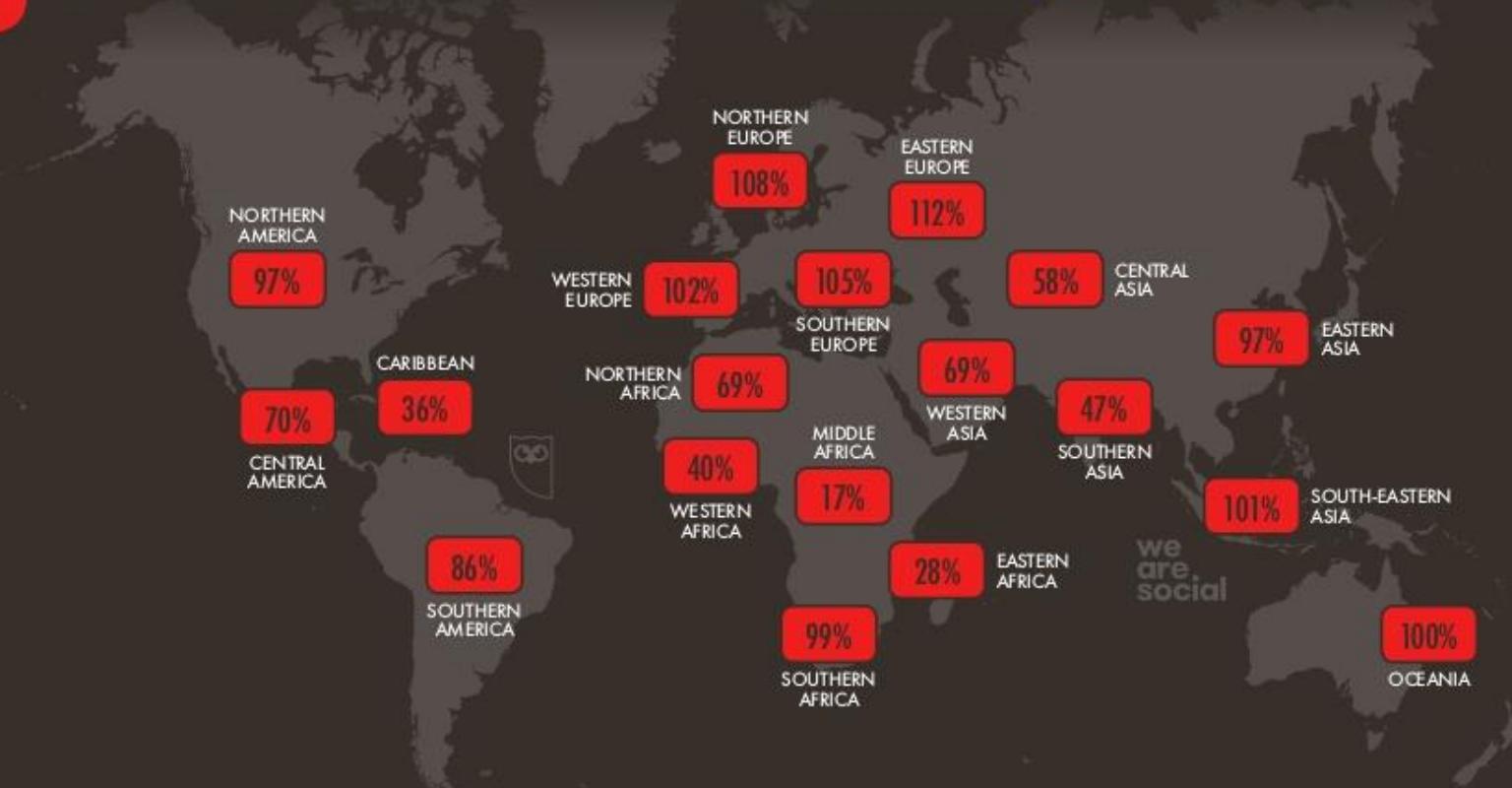
BROADBAND MOBILE CONNECTIONS (IN MILLIONS), AND AS A PERCENTAGE OF TOTAL POPULATION, BY REGION



SOURCE: GSMA INTELLIGENCE (Q4 2018); KEPiOS ANALYSIS. NOTES: FIGURES ARE BASED ON COMPARISONS TO TOTAL POPULATION, REGARDLESS OF AGE. MOBILE SUBSCRIPTIONS DO NOT REPRESENT UNIQUE INDIVIDUALS, SO FIGURES OVER 100% INDICATE MULTIPLE MOBILE SUBSCRIPTIONS PER PERSON. REGIONS AS DEFINED BY THE UNITED NATIONS GEOSCHEME. ADVISORY: GSMA INTELLIGENCE HAS REVISED ITS DATA SINCE OUR DIGITAL 2018 REPORTS, SO THE NUMBERS MAY NOT BE DIRECTLY COMPARABLE TO THOSE WE PUBLISHED LAST YEAR.

BROADBAND MOBILE CONNECTIVITY

THE NUMBER OF BROADBAND MOBILE CONNECTIONS COMPARED TO TOTAL POPULATION (NOTE: NOT UNIQUE INDIVIDUALS*)

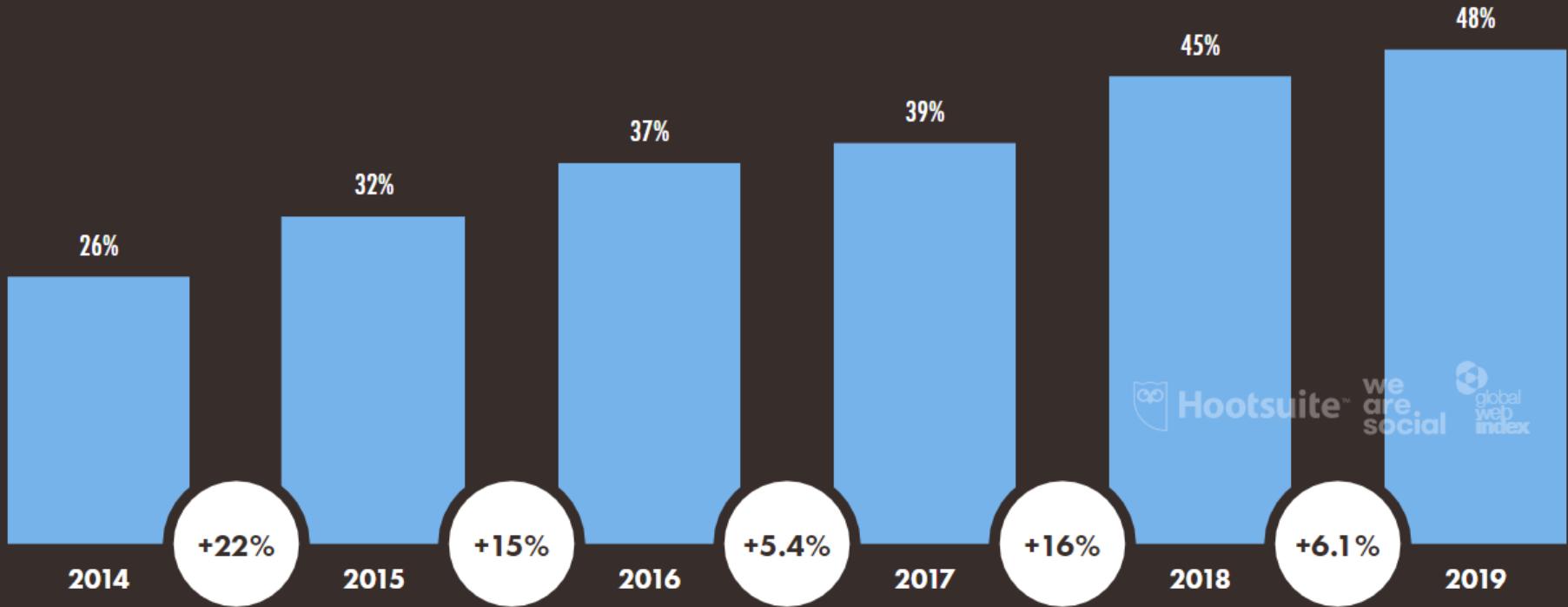


SOURCE: GSMA INTELLIGENCE (Q4 2018); KEPiOS ANALYSIS. *NOTES: FIGURES ARE BASED ON COMPARISONS TO TOTAL POPULATION, REGARDLESS OF AGE. MOBILE SUBSCRIPTIONS DO NOT REPRESENT UNIQUE INDIVIDUALS, SO FIGURES OVER 100% INDICATE MULTIPLE MOBILE SUBSCRIPTIONS PER PERSON. REGIONS AS DEFINED BY THE UNITED NATIONS GEOSCIHEME.

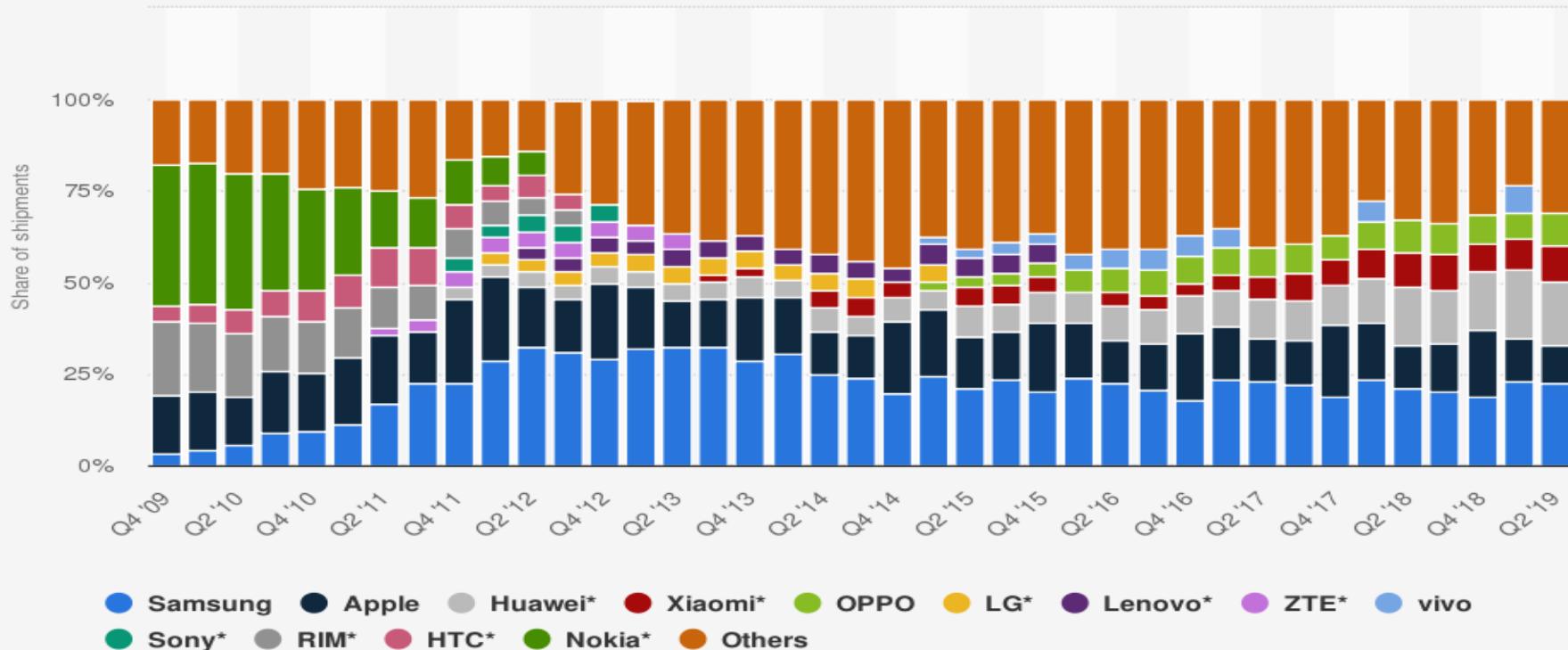
ADVISORY: GSMA INTELLIGENCE HAS REVISED ITS DATA SINCE OUR DIGITAL 2018 REPORTS, SO THESE NUMBERS MAY NOT BE DIRECTLY COMPARABLE TO THOSE WE PUBLISHED LAST YEAR.

MOBILE'S SHARE OF TOTAL INTERNET TIME

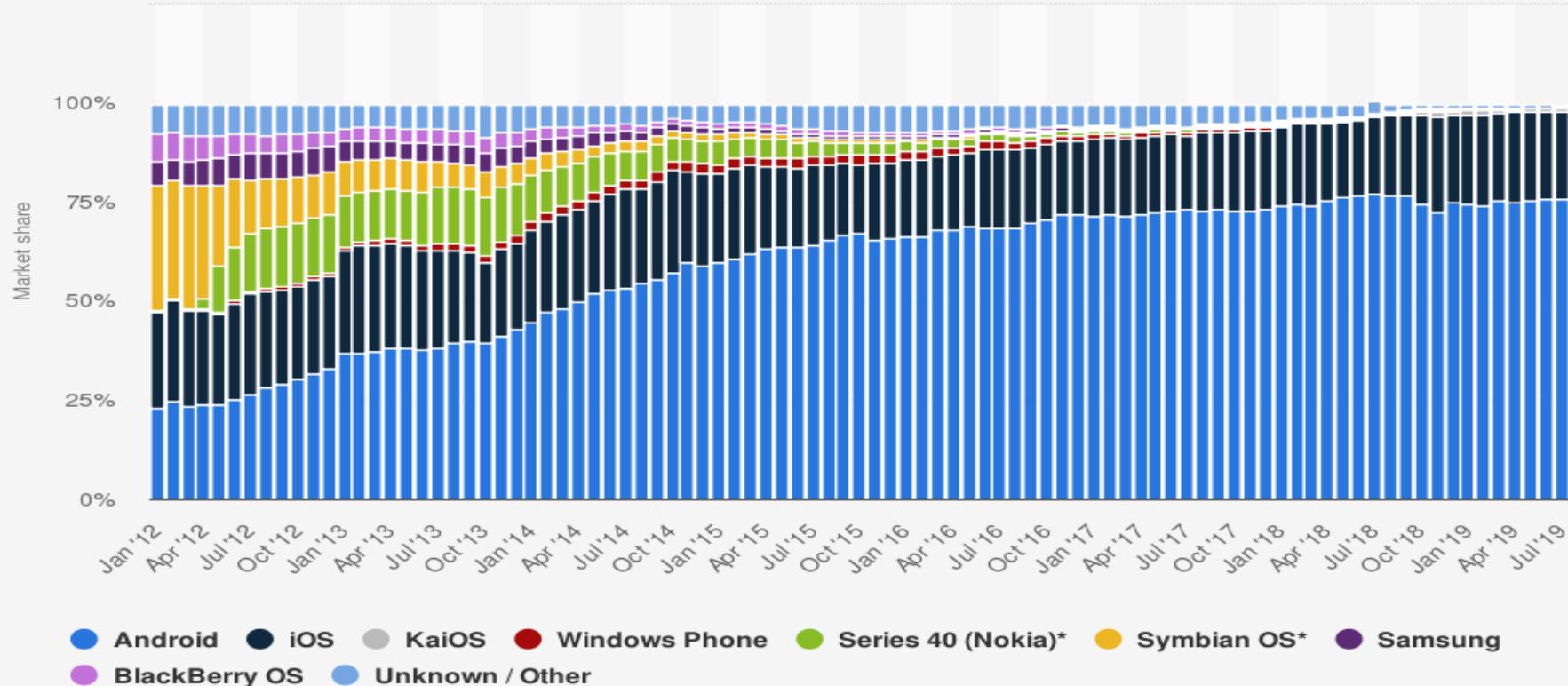
TIME SPENT USING THE INTERNET VIA MOBILE DEVICES AS A PERCENTAGE OF TOTAL DAILY INTERNET TIME, WITH YEAR-ON-YEAR CHANGE



Global market share held by leading smartphone vendors from 4th quarter 2009 to 2nd quarter 2019



Mobile operating systems' market share worldwide from January 2012 to July 2019



Source
StatCounter
© Statista 2019

Additional Information:
Worldwide; StatCounter; 2012 to 2018

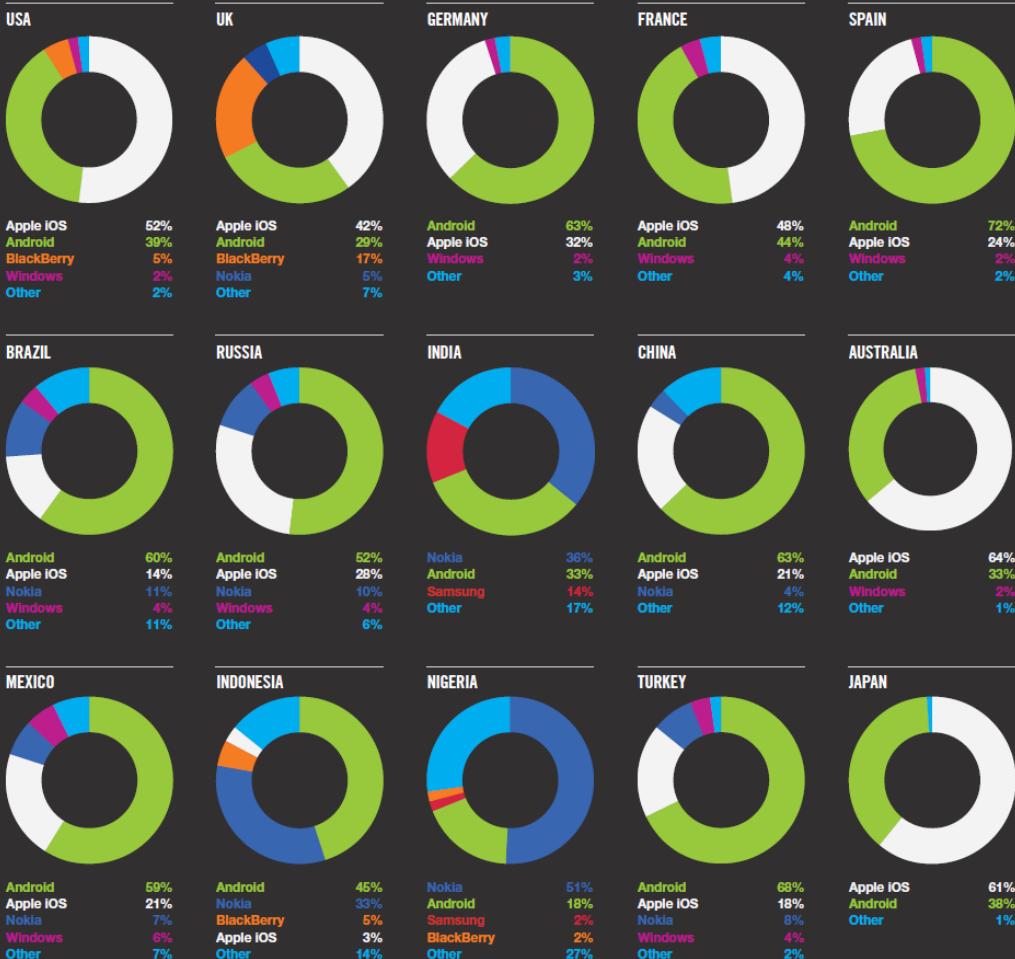
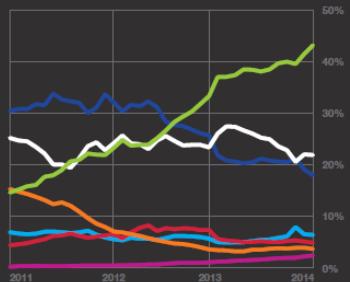
MOBILE OPERATING SYSTEM

MARKET SHARE

JANUARY 2014

WORLDWIDE MARKET SHARE SINCE 2011

Android Apple iOS BlackBerry Nokia
Samsung Windows Other

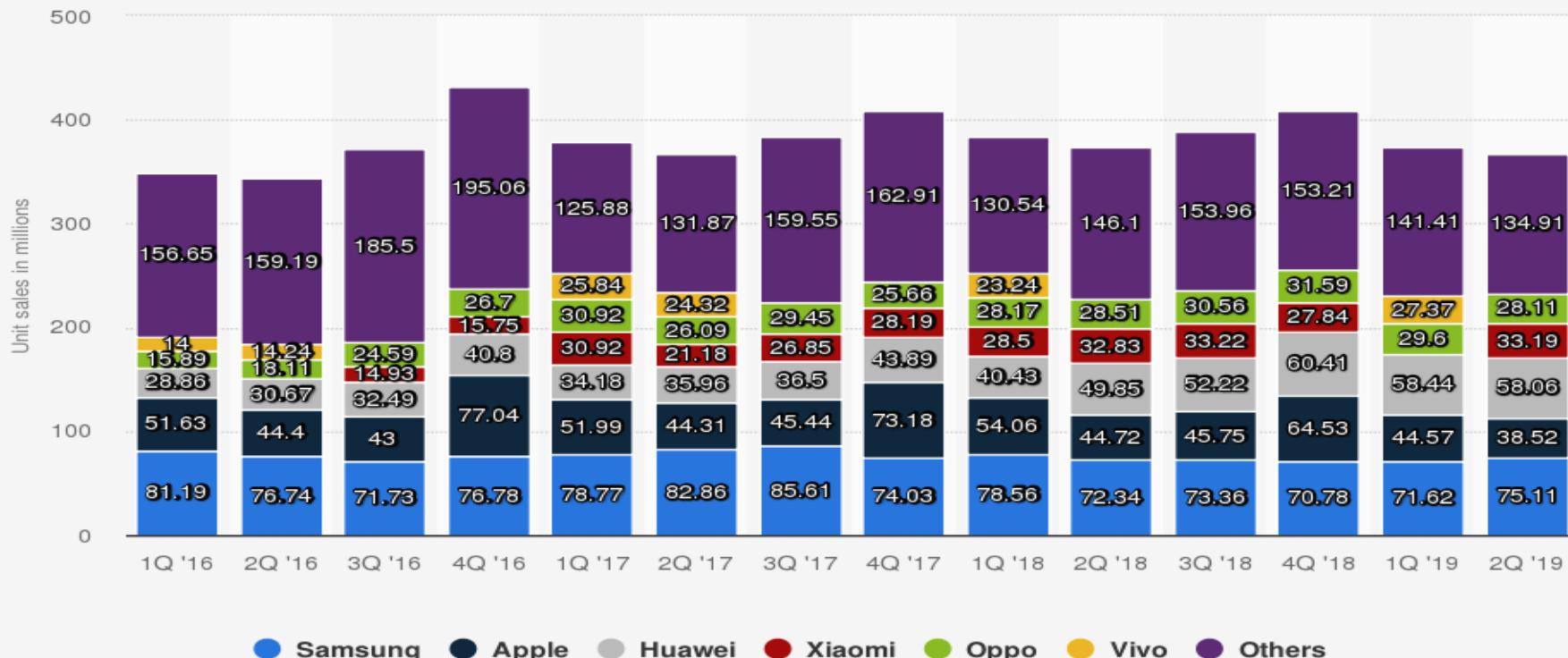


Data Source: <http://gs.statcounter.com/>
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icrossing /:::/

Smartphone unit sales to end users by vendor worldwide from the 1st quarter of 2016 to 2nd quarter of 2019 (in millions)



● Samsung ● Apple ● Huawei ● Xiaomi ● Oppo ● Vivo ● Others

Tablets

What is a Tablet?

- Larger than a Smartphone
- Touchscreen used as primary method of input
- Some typical functions are:
 - Mobile Browsing
 - Portable Media Player
 - Camera
 - Downloadable Apps



Tablet History

1971: Allan Kay describes a tablet computer at Xerox PARC

1983: Apple and AT&T work on a tablet prototype

1991: IBM markets a tablet computer but fails

1993: Apple Newton launched, also fails

1996: NewsPad debuts; considered one of the first serious prototypes

2009: Various computer manufacturers release tablets to market

2010: Apple iPad and Samsung Galaxy tab launched

2012: Microsoft Surface launched



Tablet Product Trends

Apple, Samsung, & Others



D989 Patent
Filed: March 12, 2004



iPad
April 3, 2011



iPad 2
March 11, 2011

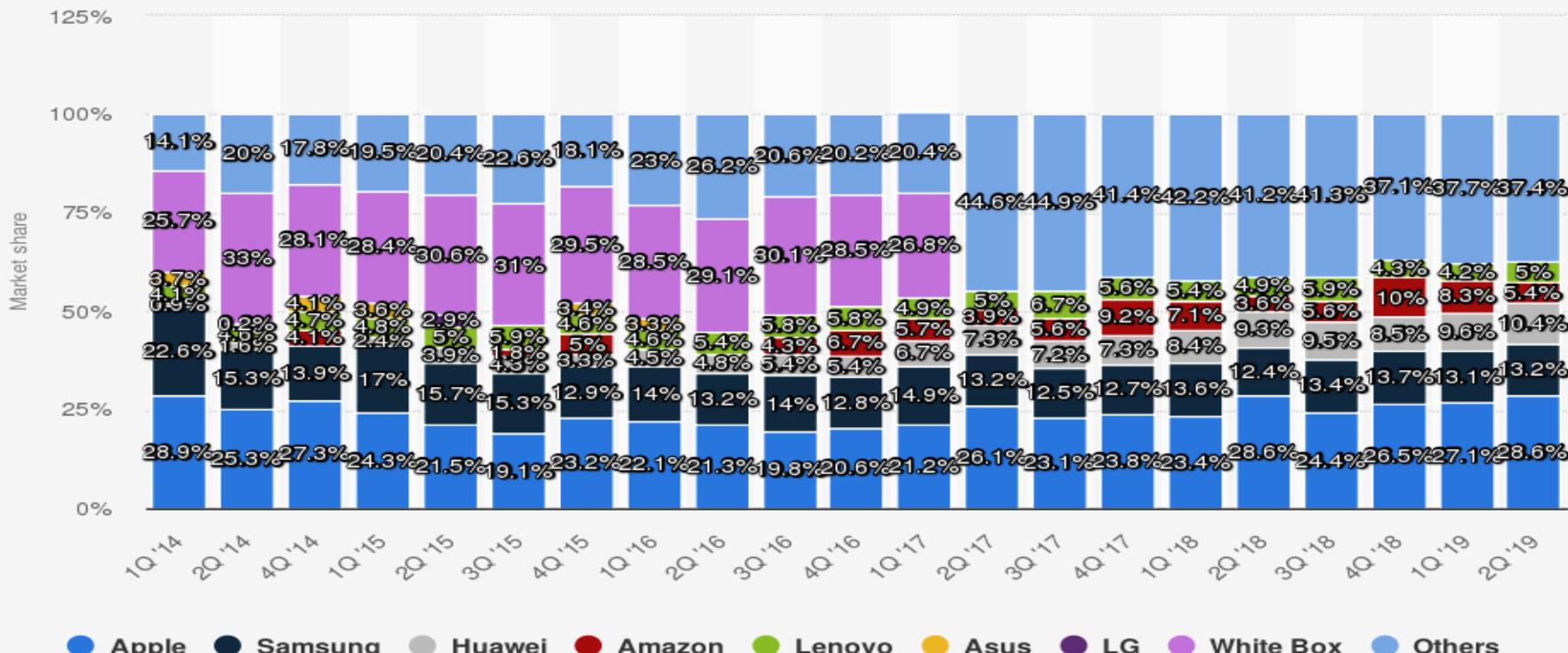
Best tablets currently on the market

1. iPad Pro 11 (2018)
2. iPad Pro 12.9 (2018)
3. iPad (2018)
4. iPad Air (2019)
5. iPad Mini (2019)
6. Samsung Galaxy Tab S6
7. iPad Mini 4
8. iPad Pro 10.5
9. Microsoft Surface Pro
10. Samsung Galaxy Tab S4



Product	Amazon Fire HD 8 (2018)	Amazon Fire HD 10	Apple iPad (2019)	Apple iPad mini (2019)	Apple iPad Air (2019)	Samsung Galaxy Tab S4	Apple iPad Pro (12.9-Inch, 2018)	Barnes & Noble Nook Tablet 7"	Huawei MediaPad M5 Lite	Amazon Fire 7 (2019)
										
Best For	Overall Bang for Buck	A Big Screen on a Budget	Budget-Friendly Apple Tablet	Power and Portability	Multimedia and Gaming	A High-End Android Tablet	Productivity	Inexpensive Google Play Access	An iPad Alternative	Rock-Bottom Price
Operating System	Amazon Fire OS	Amazon Fire OS	Apple iPadOS	Apple iOS 12	Apple iOS 12	Android 8.1	Apple iOS 12	Android 8.1	Android 8.0	Amazon Fire OS
Dimensions	8.4 by 5.0 by 0.4 inches	10.3 by 6.3 by 0.4 inches	9.8 by 6.8 by 0.3 inches	8.0 by 5.3 by 0.2 inches	9.8 by 6.8 by 0.24 inches	9.8 by 6.5 by 0.3 inches	11.0 by 8.5 by 0.2 inches	7.4 by 4.2 by 0.3 inches	6.39 by 9.58 by 0.3 inches	7.6 by 4.5 by 0.4 inches
Weight	12 oz	1.08 lb	1.07 lb	10.6 oz	1 lb	1.06 lb	1.39 lb	8.6 oz	1.05 lb	10.1 oz
Screen Size	8 inches	10.1 inches	10.2 inches	7.9 inches	10.5 inches	10.5 inches	12.9 inches	7 inches	10.1 inches	7 inches
Screen Resolution	1,280 by 800 pixels	1,920 by 1,200 pixels	2,160 by 1,620 pixels	2,048 by 1,536 pixels	2,224 by 1,668 pixels	2,560 by 1,600 pixels	2,732 by 2,048 pixels	1,024 by 600 pixels	1,920 by 1,200 pixels	1,024 by 600 pixels
CPU	MediaTek MT8163	MediaTek MT8173	Apple A10 Fusion	Apple A12 Bionic	Apple A12 Bionic	Qualcomm Snapdragon 835	Apple A12X Bionic	MediaTek MT8127	HiSilicon Kirin 659	MediaTek MT8163
Storage Capacity (as Tested)	16 GB	32 GB	32 GB	128 GB	128 GB	64 GB	1 TB	16 GB	32 GB	16 GB
Battery Rundown	4 hours, 50 minutes (video streaming)	6 hours, 14 minutes (video streaming)	6 hours, 41 minutes (video streaming)	5 hours, 7 minutes (video streaming)	6 hours, 13 minutes (video streaming)	8 hours, 33 minutes (video streaming)	Test pending	2 hours, 53 minutes (video streaming)	8 hours, 46 minutes (video streaming)	4 hours 11 minutes

Tablet shipments market share worldwide by vendor from 1st quarter 2014 to 2nd quarter 2019



Source
Strategy Analytics
© Statista 2019

Additional Information:
Worldwide; 2014 to 2019

Smart Watch

What is a Smart Watch?

- A computerized wristwatch with functionality that is enhanced beyond timekeeping, and is often comparable to a personal digital assistant device



WEARABLE TECH TIMELINE



1993
APPLE
NEWTON PDA



1999
FIRST
BLACKBERRY



2000
FIRST BLUETOOTH
HEADSET



1975
PULSAR
CALCULATOR
WATCH



1979
SONY WALKMAN



1984
CASIO
DATABANK CD-40



1987
DIGITAL
HEARING AID



2001
APPLE IPOD



2003
VIATRON
C-SERIES



2004
MOTOROLA RAZR



2004
GOPRO CAMERA



2006
NIKE+ IPOD KIT



2007
APPLE iPhone



2008
FITBIT



2011
JAWBONE UP



2012
NIKE FUELBAND



2012
PEBBLE WATCH



2013
NISSAN NISMO
SMARTWATCH



2013
MISFIT SHINE



2013
GOOGLE GLASS



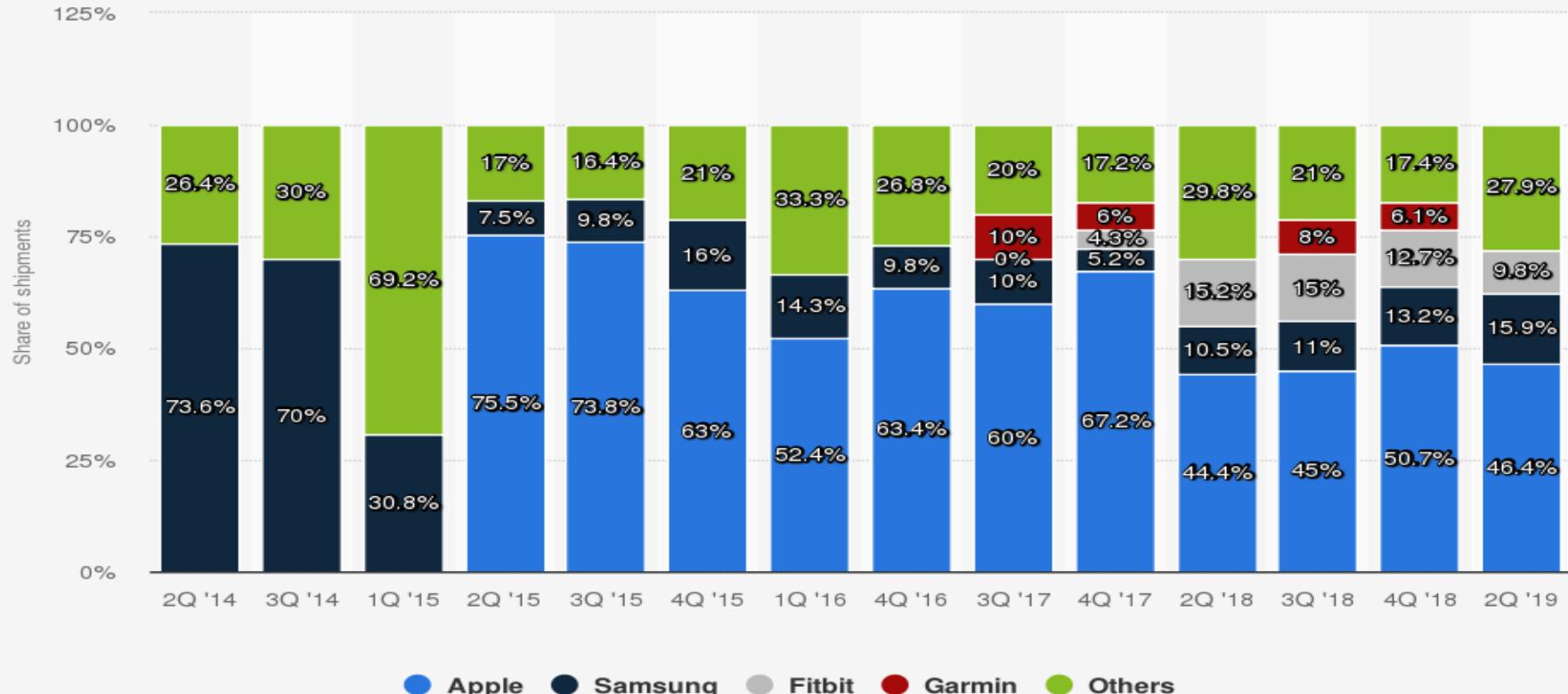
2013
SAMSUNG
GALAXY GEAR



2014
APPLE WATCH

Product	Apple Watch Series 5	Fitbit Versa 2	Apple Watch Series 3	Fitbit Ionic	Fitbit Versa Lite	Fossil Sport	Samsung Galaxy Watch Active	Huawei Watch 2	Samsung Galaxy Watch	Samsung Gear Sport
										
Phone OS Compatibility	iOS	Android, iOS	iOS	Android, iOS	Android, iOS	Android, iOS	Android, iOS	Android, iOS	Android, iOS	Android, iOS
Watch OS	watchOS	Fitbit OS	watchOS	Fitbit OS	Proprietary	Wear OS	Tizen	Wear OS	Tizen	Tizen
Processor	Apple S5	Unknown	Apple S3	Unknown	Unknown	Qualcomm Wear 3100	1.15GHz Exynos 9110	Qualcomm Snapdragon Wear 2100	1.15 GHz Exynos 9110	1GHz
Display Size	1.78 inches	1.34	1.65 inches	1.2 inches	1.34 inches	1.2 inches	1.1 inches	1.2 inches	1.2 inches	1.2 inches
Display Type	OLED	AMOLED	OLED	LCD	LCD	AMOLED	Super AMOLED	AMOLED	AMOLED	AMOLED
Fitness Features	Accelerometer, Heart Rate Monitor, GPS	Accelerometer, Heart Rate Monitor	Accelerometer, Heart Rate Monitor, GPS							
Estimated Battery Life	18 hours	5 days	18 hours; 5 hours with GPS	4 days; 10 hours with GPS	4+ days	24+ hours	2 days	2 days; 10 hours with HRM and GPS	5 days	3-4 days
Separate App Store	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Phone Call Capacity	Yes	No	Yes	No	No	No	No	No	Yes	No

Market share of smartwatch unit shipments by vendor from the 2Q'14 to 2Q'19*



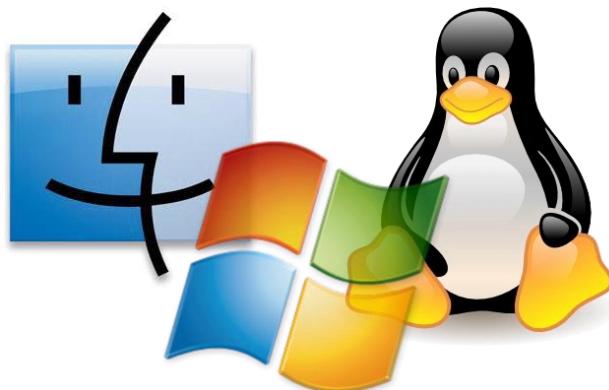
Source
Strategy Analytics
© Statista 2019

Additional Information:
Worldwide; 2014 to 2019

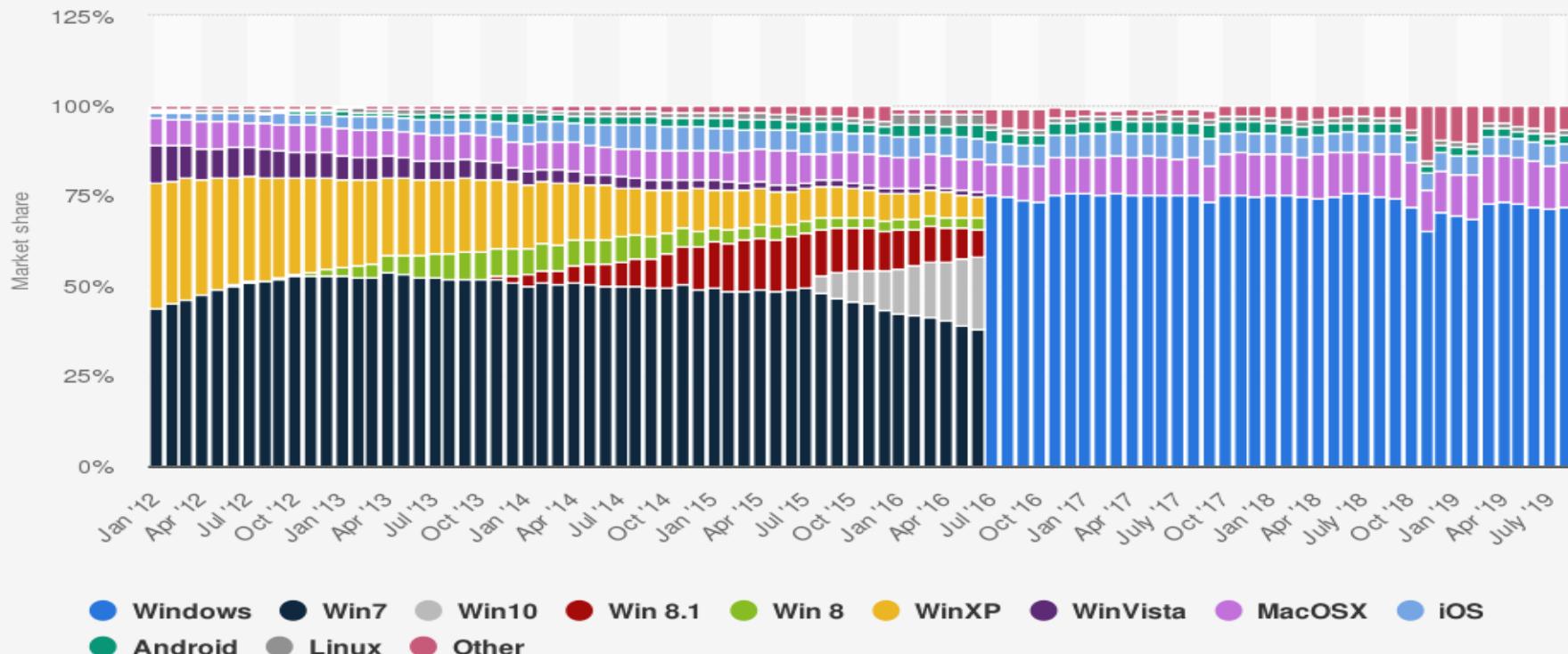
Operating System (OS)

What is an Operating System?

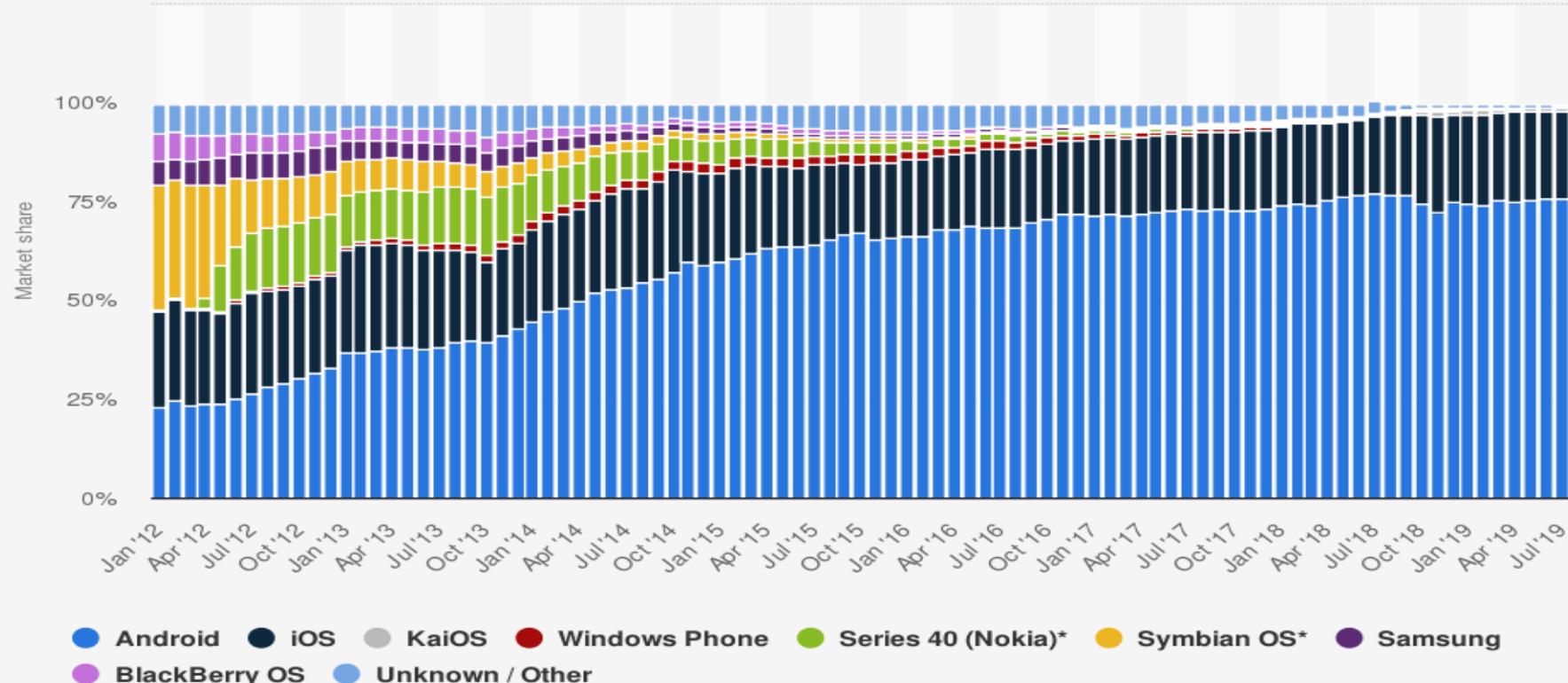
- An operating system (OS) is software that manages computer hardware resources and provides services for computer programs



Market share held by the leading computer (desktop/tablet/console) operating systems worldwide from January 2012 to August 2019



Mobile operating systems' market share worldwide from January 2012 to July 2019

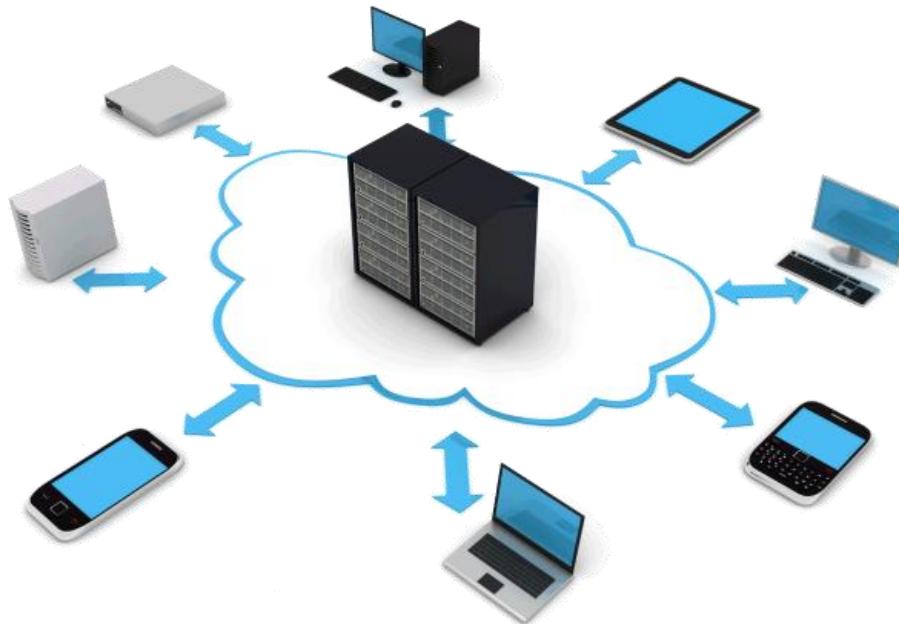


Source
StatCounter
© Statista 2019

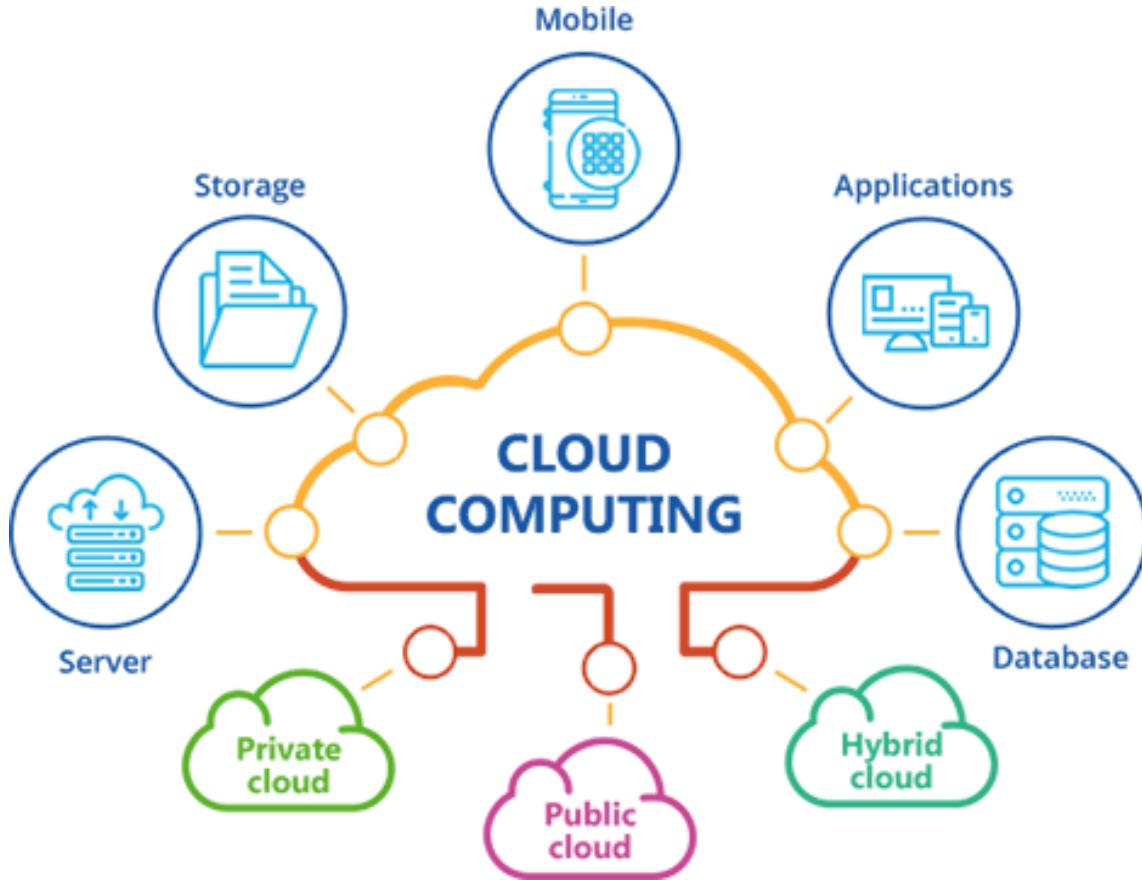
Additional Information:
Worldwide; StatCounter; 2012 to 2018

Cloud Computing

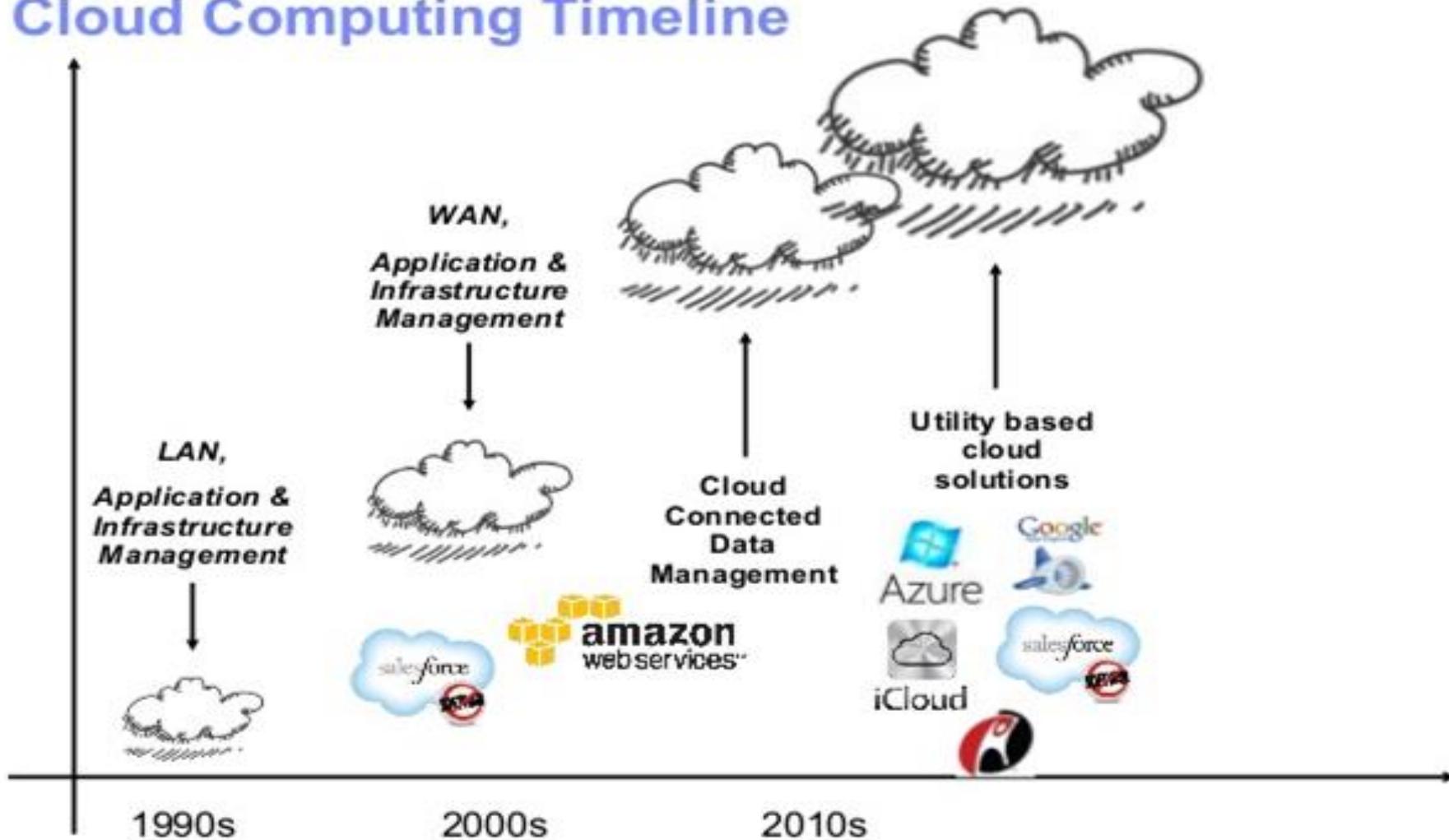
A model of network computing where a program or application runs on a connected server or servers rather than on a local computing device



Cloud Computing



Cloud Computing Timeline

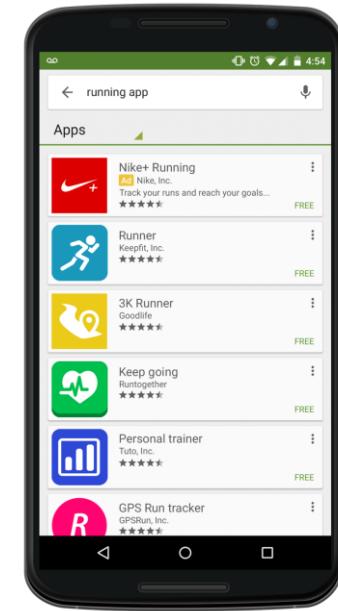


GIZMODO	AMAZON	BOX	DROPBOX	GOOGLE DRIVE	ICLOUD	MEDIAFIRE	ONEDRIVE
FREE	5GB	10GB	2GB	15GB	5GB	10GB	15GB
PREMIUM (MONTHLY)	approx. \$41.66/1TB	\$10/100GB	\$9.99/1TB	\$9.99/1TB	approx. \$8.33/55GB	\$2.50/1TB	\$9.99/1TB and Office 365
MOBILE PHOTO SYNCING	Yes	3rd Party App	Yes	Yes	Yes	Yes	Yes
WEB BASED FILE MANAGER	Yes	Yes	Yes	Yes	Limited	Yes	Yes
DESKTOP APP	Windows/Mac	Windows/Mac	Windows/Mac	Windows/Mac	Windows/Mac	Windows/Mac	Windows/Mac
MOBILE APP	Android/iOS	Android/iOS/WP	Android/iOS	Android/iOS	iOS	Android/iOS	Android/iOS/WP
FILE SHARING OPTIONS	Yes	Yes	Yes	Yes	No	Yes	Yes

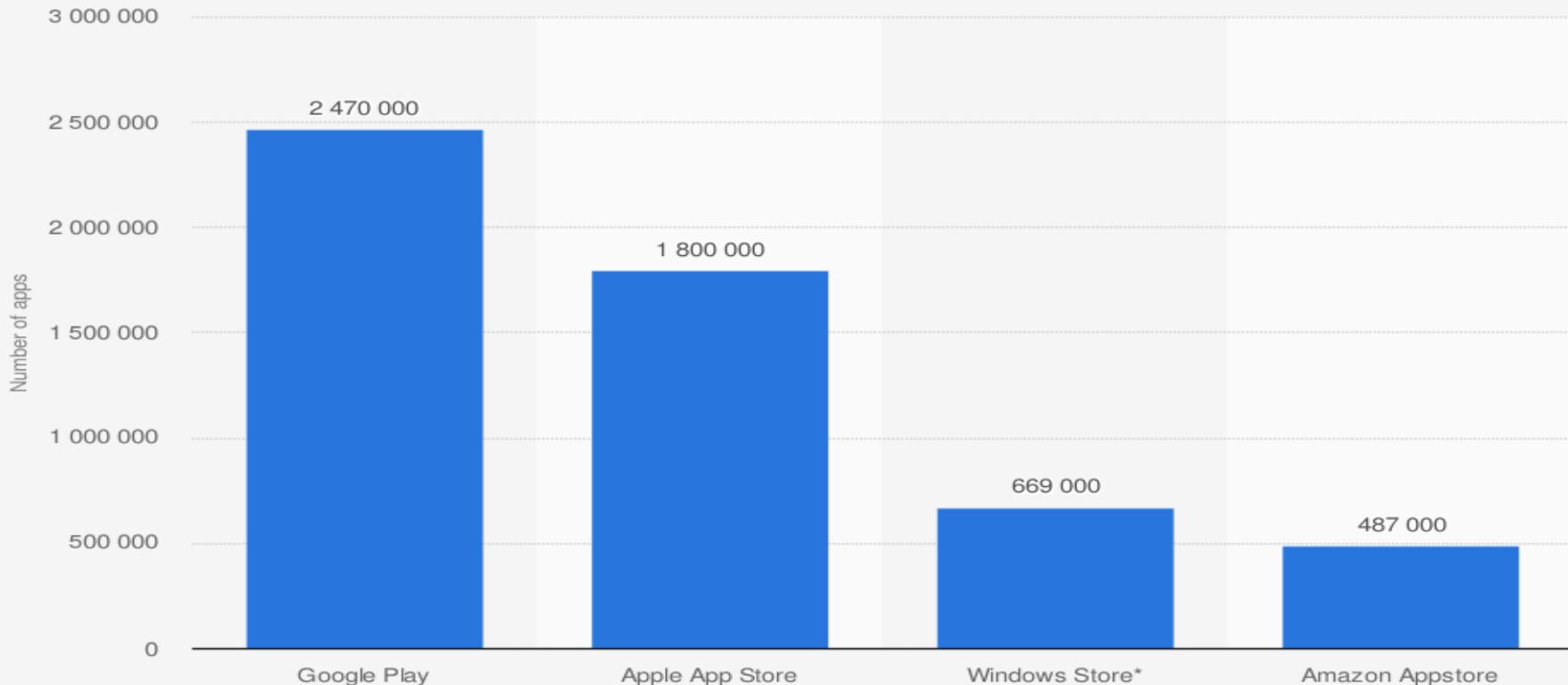
App Store

A digital distribution platform for users to download or purchase applications for devices

For entertainment, education, lifestyle, etc.



Number of apps available in leading app stores as of 3rd quarter 2019



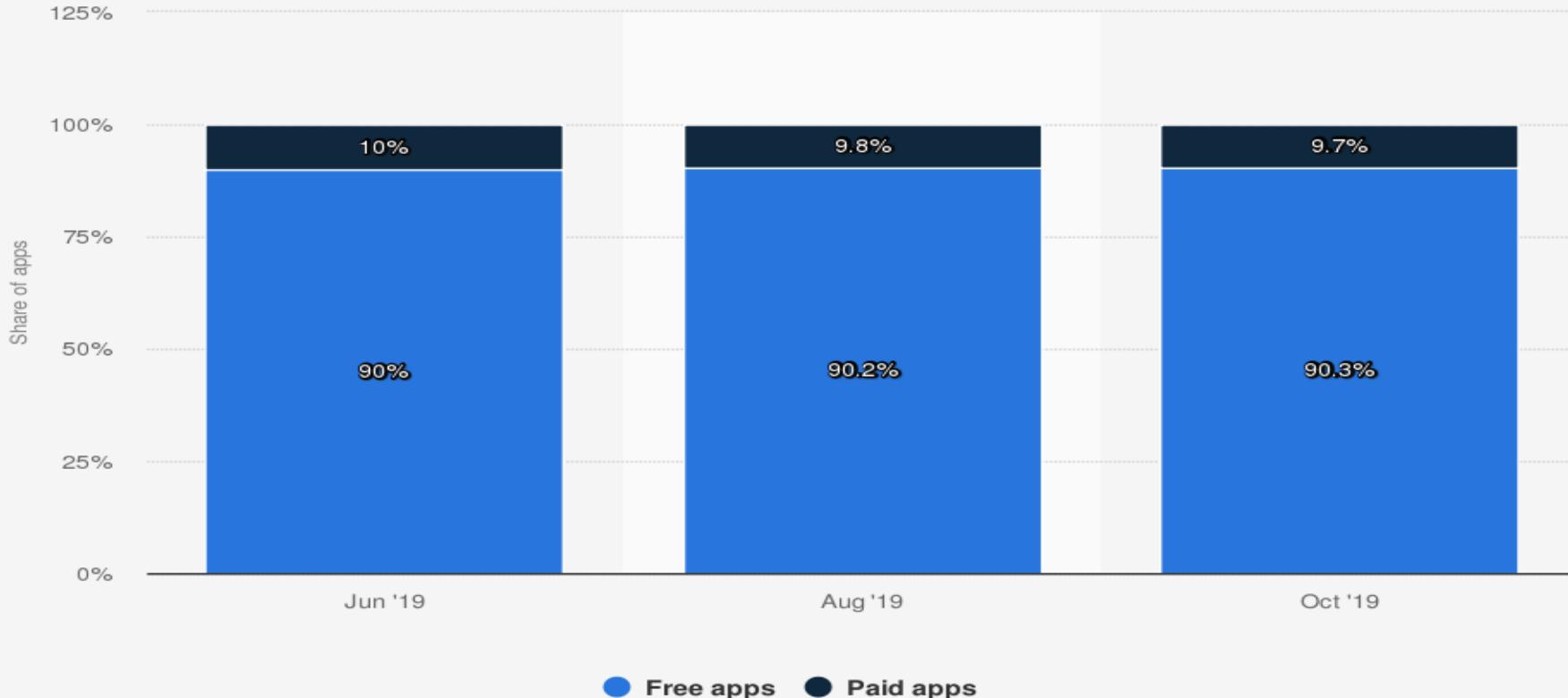
Sources

Appfigures; VentureBeat
© Statista 2019

Additional Information:

Worldwide; Appfigures; VentureBeat; Q3 2019; last reported figures

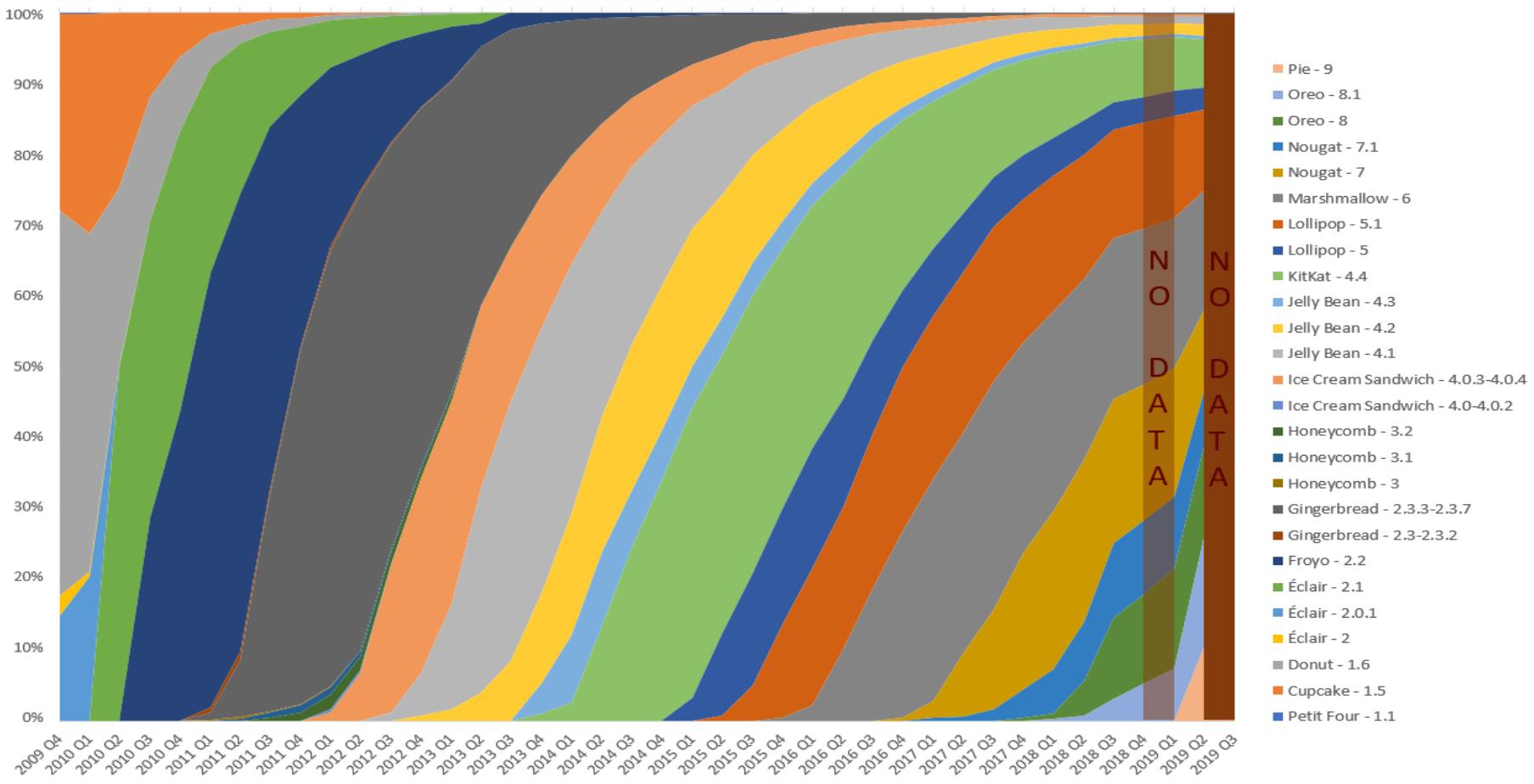
Distribution of free and paid iOS apps in the Apple App Store as of October 2019



Source
42matters
© Statista 2019

Additional Information:
Worldwide; 42matters; June to October 2019

Android Versions







Stock and Company Overview



Stock Information

Apple Inc.

NASDAQ: AAPL

246.58 USD **+3.00 (1.23%)** ↑

Closed: Oct. 25, 6:25 p.m. EDT · Disclaimer

After hours 246.73 **+0.15 (0.061%)**

1 day

5 days

1 month

6 months

YTD

1 year

5 years

Max



Open

243.16

Div yield

1.25%

High

246.73

Prev close

243.58

Low

242.88

52-wk high

246.73

Mkt cap

1.11T

52-wk low

142.00

P/E ratio

20.20



Stock Information

DAY RANGE	EPS
242.88 - 246.73	\$11.74
52 WEEK RANGE	YIELD
142.00 - 246.73	1.25%
MARKET CAP	DIVIDEND
\$1.1T	\$0.77
SHARES OUTSTANDING	EX-DIVIDEND DATE
4.6B	Aug 9, 2019
PUBLIC FLOAT	SHORT INTEREST
4.51B	48.02M 10/15/19
BETA	% OF FLOAT SHORTED
1.24	1.06%
REV. PER EMPLOYEE	AVERAGE VOLUME
\$1.98M	28.77M

Share Structure



Weighted Average Shares Outstanding (in Billions)

2016	2017	2018	Jun 30, 2019
5.5	5.252	5	4.601

Annual Diluted Earnings Per Share

2016	2017	2018	Jun 30, 2019
8.31	9.21	11.91	11.77



Stock Information: 1 year performance





Stock Information: 3 year performance





Stock Information: 3 year comparison





Stock Information: 10 year performance





Stock Information: 10 year comparison



Stock Information: Max Timeframe performance



Top Shareholders: Institutions



Top 10 Owners of Apple Inc

Stockholder	Stake	Shares owned	Total value (\$)	Shares bought / sold	Total change
The Vanguard Group, Inc.	7.27%	328,525,375	73,579,828,239	-3,317,083	-1.00%
Berkshire Hathaway, Inc. (Investm...	5.52%	249,589,329	55,900,522,016	0	0.00%
BlackRock Fund Advisors	4.28%	193,179,452	43,266,401,864	-3,811,227	-1.93%
SSgA Funds Management, Inc.	4.14%	187,085,416	41,901,520,622	-3,564,861	-1.87%
Fidelity Management & Research Co...	2.01%	90,635,159	20,299,556,561	-2,699,602	-2.89%
Geode Capital Management LLC	1.37%	61,746,765	13,829,422,957	+682,953	+1.12%
Northern Trust Investments, Inc.(...	1.31%	58,966,400	13,206,704,608	-311,739	-0.53%
Norges Bank Investment Management	1.05%	47,548,836	10,649,512,799	-3,236,761	-6.37%
Invesco Capital Management LLC	0.90%	40,767,482	9,130,692,944	-119,048	-0.29%
BlackRock Investment Management (...	0.68%	30,830,410	6,905,086,928	-369,899	-1.19%



Company Overview

Company Background



Apple Inc. (formerly Apple Computer, Inc.) founded by **Steve Jobs**, Steve Wozniak and Ronald Wayne (1976)

It designs, manufactures, and markets mobile communication and media devices, personal computers, and portable digital music players, and sells a variety of related software, services, peripherals, networking solutions, and third-party digital content and applications

Products sold worldwide through its online stores, its retail stores, its direct sales force, third-party cellular network carriers, wholesalers, and resellers

Headquartered in **Cupertino, California**





Business Strategy

- Commitment to bringing the best user experience to its customers through its innovative hardware, software and services
- Unique ability to design and develop its own operating systems, hardware, application software
- Services to provide its customers products and solutions with innovative design, superior ease-of-use and seamless integration
- Expand platform for discovery and download of digital content by customers
- Supporting third-party software and hardware development which can complement their products and services
- Investment in R&D, marketing, and advertising to encourage the sale of innovative technology



Product and Services

- iPhone
- iPad
- Mac
- Operating System Software
 - iOS, macOS, watchOS, tvOS
- Accessories (connectivity supplies, headphones, displays, storage devices, etc.)
- iPod
- Apple Watch
- Apple TV
- Internet Services
- iCloud
- AppleCare
- Apple Pay
- Apple News+





Products: iPhone

- Smartphone with a user interface built around the device's multi-touch screen including a virtual keyboard
- Shoot video, take pictures, download apps, play music, send/receive text messages and e-mail
- Originally released in 2007
- Largest market share in the US
- Latest model: iPhone 11, iPhone 11 Pro, iPhone 11 Pro Max





Products: iPad

- Line of tablet computers, with user interface and capabilities similar to the iPhone
- Series: iPad Mini, iPad Air, iPad Pro, iPad
- Includes Siri and Touch ID
- Latest release: 10.2" Pro, Mini 5





Products: Mac

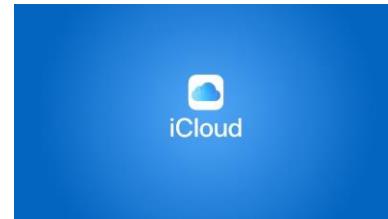
- Line of notebook and desktop computers based on the MacOS operating system
- MacBook lineup consists of the Macbook Air, Macbook Pro, Macbook, iMac, iMac Pro
- Long battery life, fast storage, beautiful display, thin and lightweight
- Current desktop models include 27-inch LED-backlit Retina 5K display, 3.2GHz, 4TB SSD, Intel Core i9 processors





Services: iCloud

- Apple's cloud storage service which stores music, photos, contacts, calendars, mail, documents and more
- Works across devices (iPhone, Mac, even Windows personal computers)
- Includes the iCloud Drive, Find My iPhone, Notes, iCloud KeyChain
- Provides means to back-up important personal data directly (wirelessly)
- 5GB of free storage space, 500GB \$1.29/month, 200GB \$3.99/month, 2TB \$12.99/month





Services: Apple Pay

- Mobile payment service available in certain countries
- Offers an easy, secure, fast and private way to pay
- Digitalizes and can replace credit or debit cards with the chip and pin or magnetic stripe
- Wireless communication with point of sale by using near field communication antenna, secure element (a chip that stores encrypted private information), Touch ID and Wallet





Other Services

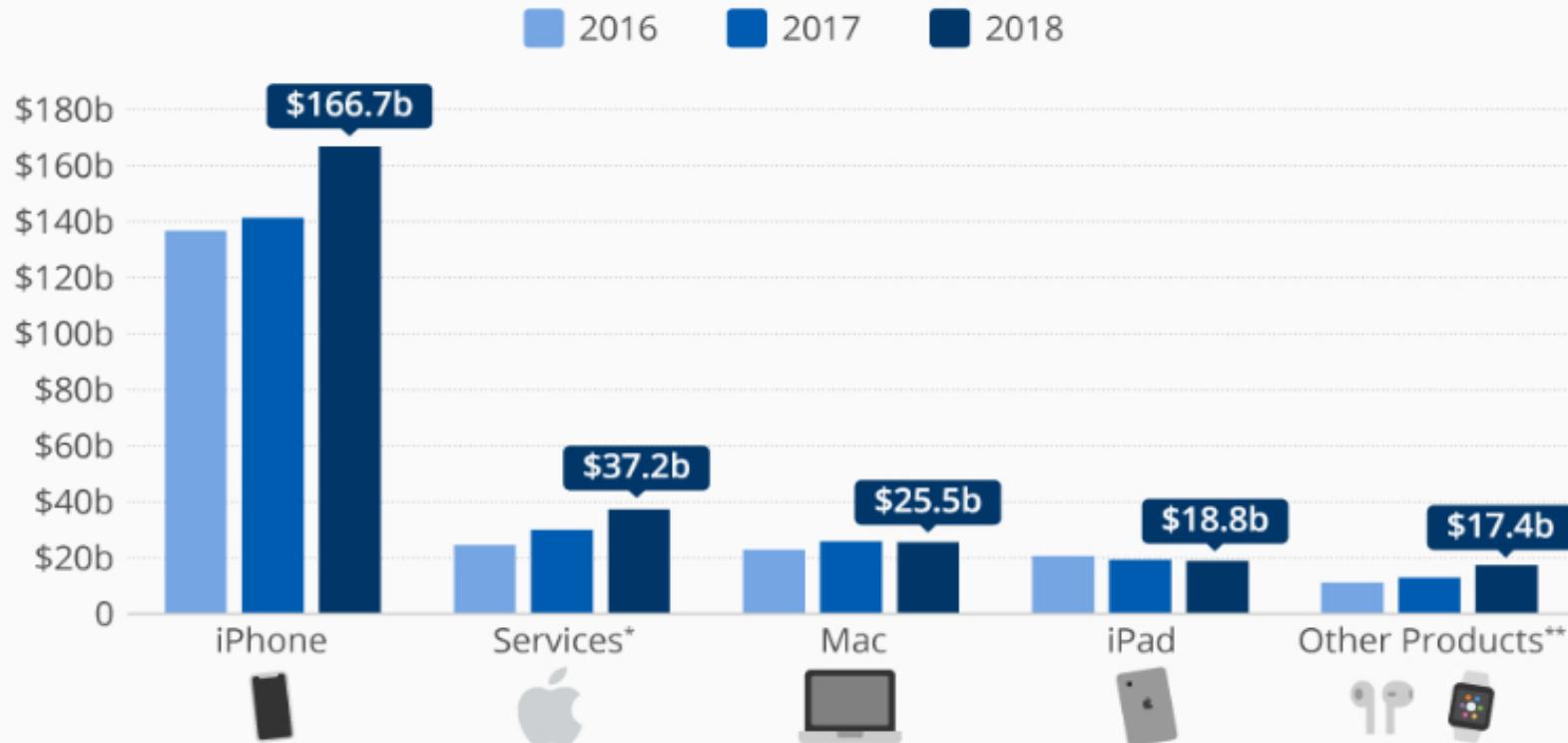
- iTunes store allows to purchase, rent, and download music, TV shows and podcasts to be played on the iTunes player
- App Store allows customers to download and purchase applications for their iOS devices, as well as discover in-app content
- iBooks features e-books from major and independent publishers for customers to purchase and read across iOS devices and Mac
- Apple Music is the music streaming service, which offers curated playlists and on-demand radio stations and an unlimited music library for download and offline listening. The customer pays a monthly subscription fee for an individual, student or family plan.
- Apple News+ is an immersive magazine and news reading experience. The monthly subscription fee is \$12.99 per month.





Beyond the iPhone

Apple's revenue by product group (fiscal years ending in September)





Sales by Segment and Products

	Three Months Ended			Nine Months Ended		
	June 29, 2019	June 30, 2018	Change	June 29, 2019	June 30, 2018	Change
Net sales by reportable segment:						
Americas	\$ 25,056	\$ 24,542	2 %	\$ 87,592	\$ 84,576	4 %
Europe	11,925	12,138	(2)%	45,342	47,038	(4)%
Greater China	9,157	9,551	(4)%	32,544	40,531	(20)%
Japan	4,082	3,867	6 %	16,524	16,572	— %
Rest of Asia Pacific	3,589	3,167	13 %	14,132	13,978	1 %
Total net sales	<u>\$ 53,809</u>	<u>\$ 53,265</u>	1 %	<u>\$ 196,134</u>	<u>\$ 202,695</u>	(3)%
Net sales by category:						
iPhone (1)	Three Months Ended			Nine Months Ended		
	June 29, 2019	June 30, 2018	Change	June 29, 2019	June 30, 2018	Change
iPhone (1)	\$ 25,986	\$ 29,470	(12)%	\$ 109,019	\$ 128,133	(15)%
Mac (1)	5,820	5,258	11 %	18,749	17,858	5 %
iPad (1)	5,023	4,634	8 %	16,624	14,397	15 %
Wearables, Home and Accessories (1)(2)	5,525	3,733	48 %	17,962	13,158	37 %
Services (3)	11,455	10,170	13 %	33,780	29,149	16 %
Total net sales	<u>\$ 53,809</u>	<u>\$ 53,265</u>	1 %	<u>\$ 196,134</u>	<u>\$ 202,695</u>	(3)%



Company History



History and Development: Early Stage

1976

- Founded in Cupertino by Steve Jobs, Ronald Wayne and Steve Wozniak
- Apple I sells for \$666.66 (200 units)

1977

- Apple II released at \$1,300
- Incorporated in the state of California

1979

- First app unveiled: VisiCalc





History and Development: The 80's



1980

- December 12: IPO launched at \$22M, selling \$4.6M shares
- Release of Apple III

1983

- LISA (Local Integrated System Architecture) released at \$9,995, one of the first personal computers to offer a GUI in a machine; sells only 10,000 units

1984

- Launch of the Macintosh 128K with initial price of \$2,495..beige case, keyboard and mouse

1985

- Steve Jobs leaves Apple and starts NeXT

1987

- Apple registered the Apple.com domain name (one of the first companies to use .com)



History and Development: The 90's

1993

- The Newton released (early PDA model)

1994

- Apple releases its first PowerPC-based desktop computers and notebooks

1997

- Apple acquires NeXT and its OS, NeXTSTEP
- Steve Jobs returns as advisor; appointed interim CEO
- Introduction of Apple Store
- Company faces financial trouble, as share price hits 12-year low

1998

- iMac launched

1999

- iBook released





History and Development: The 2000s

2001

- Mac OS X
- Opening of Apple Retail Stores
- First iPod

2002

- iMac G4

2003

- iTunes Music Store

2004

- Release of iMac G5 and iPod Mini

2005

- Release of iPod Shuffle and iPod Nano

2006

- MacBook Pro

2007

- iPhone and iPhone 3G

- iPod Touch

- Apple TV

2008

- MacBook Air





History and Development: 2010-Present

2010

- iPad and iPhone 4

2011

- iCloud announced
- Steve Jobs resigns as CEO due to illness, replaced by Tim Cook
- Apple passes Exxon to become the most valuable company in the world



2012

- iPhone 5 and iPad Mini released
- Apple Maps launched

2013

- iPhone 5S/5C launched



APPLE TIMELINE

Apple Inc took the wraps off a faster 4G-equipped iPad starting at \$629, hoping the latest version of its tablet can safeguard its dominance over rivals

SHARE PRICES AND KEY PRODUCT RELEASES

(Daily close)

400

350

300

250

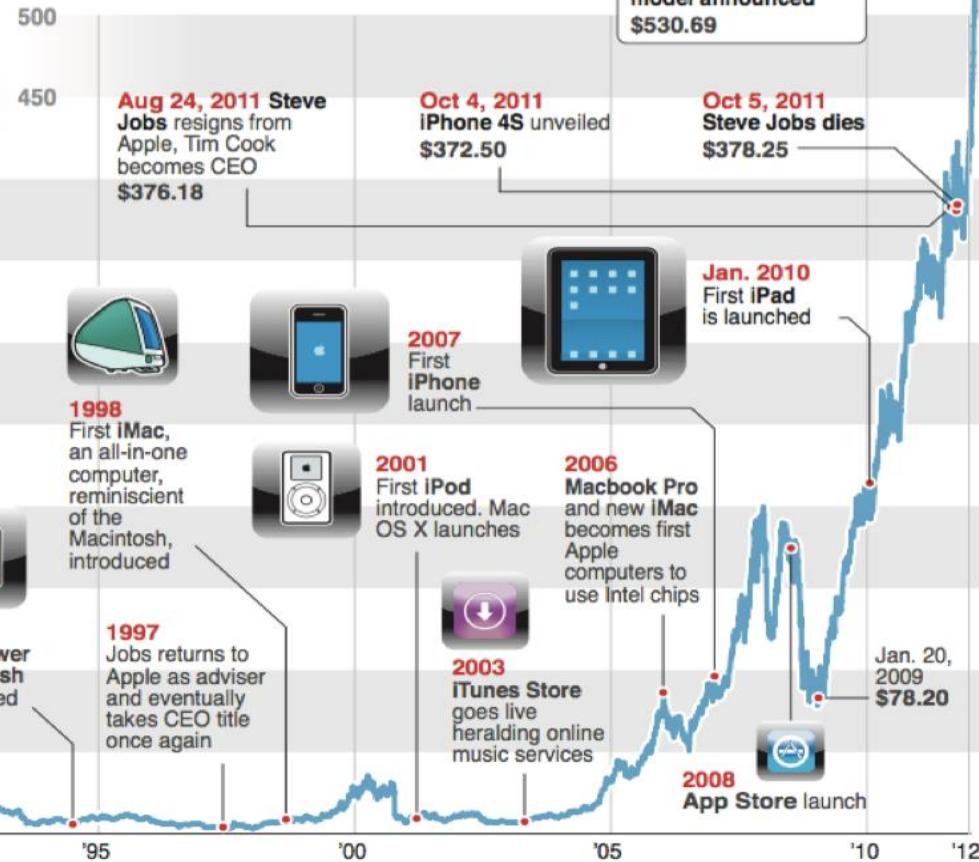
200

150

100

50

0





History and Development: 2010- Present

2014

- Apple Pay launched

2015

- iPhone 6 and 6S Plus released
- iPad Pro
- Apple Watch
- Apple Music

2016

- iPhone SE
- MacBook (Rose Gold, Space Grey, Silver, Gold)

2017

- New iPhone 8 release expected in September
- iOS 11 Beta Released
- Releases for latest versions of the iPad, Apple Watch, and Macs





History and Development: 2010- Present

2018

- iOS12 released
- iPhone XS and XR
- MacBook
- iPad Pro
- Apple Watch 4

2019

- iPhone 11, 11 Pro and Pro Max
- MacBook Pro
- Apple Watch 5





Key Acquisitions

1997: NeXT (computer programming services)

- Derived Products: OS X and iOS
- \$404 million

2000: SoundJam MP (Software)

- Derived Products: iTunes
- 2005: Fingerworks
- Derived Product: Multi-touchscreen

2008: P.A. Semi (semiconductors)

- Derived Products: Apple A4 and A5 chips
- \$278 million

2009: Lala.com (music streaming)

- Derived Products: iCloud, iTunes Match
- \$80 million





Key Acquisitions

2010: Siri (Voice control software)

- Derived Products: Siri
- \$200 million

February 23, 2012: Chomp (App search engine)

- Derived Products: App store
- \$50 million

July 27, 2012: AuthenTec (PC and mobile security)

- Derived Products: Touch ID
- \$356 million





Key Acquisitions

2014: Beats Electronics

- Derived products: Apple Music
- \$3 Billion



2015: linX (camera)

- Derived products: iPod, iPhone, iPad
- \$20 Million

2016: Flyby Media (Augmented reality software)

- Acquired to aid Apple's in developing for virtual reality



Key Acquisitions

2017: Lattice Data (Artificial Intelligence)

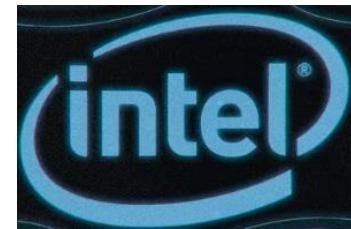
- Acquired to aid Apple's Development in AI
- \$200 Million

2018: Shazam (Music)

- Identify songs by listening to the music around them
- Downloaded over 1 billion times around the world
- \$400 Million

• 2019: Intel's smartphone modem business (Smartphones)

- Produce its own 5G modems for smartphones
- \$1 billion





Management Team



- Co-founder (with Wozniak) and former CEO
- Considered as a pioneer of the microcomputer revolution
- Education: Reed College (dropped out)
- Left the company in 1985, returned in 1997
 - NeXT
 - PIXAR
- Work closely with Ive and oversaw the development of iMac, iTunes, iPhone, and iPad on the service side, as well as Apple retail stores
- Diagnosed with a pancreatic neuroendocrine tumor in 2003 and died in 2011 of respiratory arrest due to the tumor





Chief Executive Officer (since August 2011, joined company in 1998)

- Formerly the COO; previous responsibilities included worldwide sales and operations, end-to-end supply chain, sales activities, service and support in markets across the globe
- Headed Macintosh division; led development of reseller and supplier relationships to meet increasing demands
- Previous served roles with Compaq, IBM, and Intelligent Electronics
- Education: BS in Industrial Engineering from Auburn (1982); MBA from Duke (1988)





Former Senior Vice President, Retail (joined company in 2014 and left April 2019)



- Responsible for strategy, real estate & development, and operations of Apple's physical stores, Apple's online store and contact center
- Integrated digital and physical retail business for better customer experience for entertaining, enriching, and educating communities
- Formerly the CEO of Burberry, where company underwent "outstanding" growth under her leadership
- Education: Marketing and Merchandising degree (1982) and honorary doctorate of Humane Letters (2010) from Ball State



Senior Vice President, Retail (Joined in 1988)

- Replacement of Angela Ahrendts
- 30-year Apple veteran
- Operation Specialist, running demand forecasting
- Education: Bachelor's degree in Operations Management from Michigan State University and an MBA from San Jose State University.





Senior Vice President, Internet Software and Services (joined company in 1989)

- Oversees the iTunes Store and Apple Music, as well as Apple Pay, Siri, Maps, iAd, Apple's innovative iCloud services, and Apple's productivity and creativity apps
- Credited for creating the Apple online store in 1998, iTunes store in 2003, and App Store in 2008 and played a key role in the development of the iLife suite
- Education: Bachelors' in Computer Science and Economics from Duke





Senior Vice President, Software Engineering (second stint with company in 2009)

- Oversees the development of iOS, macOS and Apple's common operating system engineering teams
- His teams are responsible for the software of the products – interface, applications, and frameworks
- Has led the development of major operating systems including OS X Mavericks
- Previously worked at NeXT and Ariba where he was the CTO
- Education: MS in Computer Science and BS in Electrical Engineering and Computer Science from UC Berkeley





Chief Design Officer (joined company in 1992)

- Was Responsible for all design at Apple, including the hardware, user interface, packaging, major architectural projects such as Apple Campus 2 and Apple's retail stores, as well as new ideas and future initiatives
- Decide to leave his position this year and start his own design business, LoveFrom, plans to continue working closely with Apple as a client.
- Apple has not decide on immediate replacement for Ive
- Education: Bachelor of Arts from Newcastle Polytechnic, also holds honorary doctorates from 3 other institutions





Senior Vice President and Chief Financial Officer (joined company in 2013)

- Oversees the accounting, business support, financial planning and analysis, treasury, M&A, investor relations, internal audit and tax functions
- Worked as vice president of finance and corporate controller when he arrived
- Previously served as CFO at Xerox and Nokia Siemens Networks and CFO of GM's European operations
- Education: Master's degree in Science of Management from Boston University and Bachelor's in Economics from Luiss University





Senior Vice President, Hardware Engineering (joined company in 1998)

- leads the Mac, iPhone, iPad and iPod engineering teams
- Joined as VP of Product Design and in 2010 was named VP of iPad of Hardware Engineering
- Key contributions to most of Apple's hardware especially the iPad
- Prior to Apple, he worked at Compaq as a Mechanical Engineering manager
- Education: Bachelor's in Mechanical Engineering from University of Massachusetts Amherst





Senior Vice President, Worldwide Marketing (re-joined company in 1997)

- Has helped the company create the best computers in the world with the Mac, lead the digital music revolution with iPod and iTunes, reinvent mobile phones with iPhone and the App Store, and define the future of mobile computing with iPad
- Various roles in marketing management positions (Macromedia, FirePower Systems, Nolan, Norton and Company and Mass. General in Boston)
- Education: BS in Biology from Boston College (1982)





Senior Vice President and General Counsel (joined company in 2009)

- Serves on the company's executive team and oversees all legal matters, including corporate governance, intellectual property, litigation and securities compliance, global security and privacy
- Previously worked at Intel, leading their legal, corporate and social responsibility programs, managing litigation portfolio and corporate transactions
- Education: J.D. from George Washington University (1986) and BS of University of Lancaster (1979)





Senior Vice President, Hardware Technologies (joined in 2008)

- Joined company to lead development of the A4 (first Apple-designed system on a chip)
- Has built one of the world's strongest and most innovative teams of silicon and technology engineers, overseeing breakthrough custom silicon and hardware technologies including batteries, application processors, storage controllers, sensors silicon, display silicon and other chipsets across Apple's entire product line
- Prior to Apple, Johny held senior positions at Intel and IBM in the area of processor development and design
- Education: Bachelor's and Master's degree in Computer Science from Technion, Israel's Institute of Technology





Chief Operating Officer (joined company in 1998)

- Oversees the development of Apple Watch, and drives the company's health initiatives including ResearchKit
- Since 2010, he has overseen Apple's entire supply chain, service and support, and the social responsibility initiatives which protect more than one million workers worldwide
- Played a key role in Apple's entry into the mobile phone market with the launch of iPhone, and since 2010 has led worldwide operations for all products
- Previously worked at IBM in operations and engineering
- Education: Bachelor's degree in Mechanical Engineering from North Carolina State University and an MBA from Duke



Financial Analysis



Balance Sheet: 10-Q (Assets)

	June 29, 2019	September 29, 2018
ASSETS:		
Current assets:		
Cash and cash equivalents	\$ 50,530	\$ 25,913
Marketable securities	44,084	40,388
Accounts receivable, net	14,148	23,186
Inventories	3,355	3,956
Vendor non-trade receivables	12,326	25,809
Other current assets	10,530	12,087
Total current assets	<u>134,973</u>	<u>131,339</u>
Non-current assets:		
Marketable securities	115,996	170,799
Property, plant and equipment, net	37,636	41,304
Other non-current assets	33,634	22,283
Total non-current assets	<u>187,266</u>	<u>234,386</u>
Total assets	<u><u>\$ 322,239</u></u>	<u><u>\$ 365,725</u></u>



Balance Sheet: 10-Q (Liability and shareholders' Equity)

LIABILITIES AND SHAREHOLDERS' EQUITY:			
Current liabilities:			
Accounts payable	\$ 29,115	\$ 55,888	
Other current liabilities	31,673	33,327	
Deferred revenue	5,434	5,966	
Commercial paper	9,953	11,964	
Term debt	13,529	8,784	
Total current liabilities	89,704	115,929	
Non-current liabilities:			
Term debt	84,936	93,735	
Other non-current liabilities	51,143	48,914	
Total non-current liabilities	136,079	142,649	
Total liabilities	225,783	258,578	
Commitments and contingencies			
Shareholders' equity:			
Common stock and additional paid-in capital, \$0.00001 par value: 12,600,000 shares authorized; 4,531,395 and 4,754,986 shares issued and outstanding, respectively	43,371	40,201	
Retained earnings	53,724	70,400	
Accumulated other comprehensive income/(loss)	(639)	(3,454)	
Total shareholders' equity	96,456	107,147	
Total liabilities and shareholders' equity	\$ 322,239	\$ 365,725	



Balance Sheet: 10-K (Assets)

	September 29, 2018	September 30, 2017
ASSETS:		
Current assets:		
Cash and cash equivalents	\$ 25,913	\$ 20,289
Marketable securities	40,388	53,892
Accounts receivable, net	23,186	17,874
Inventories	3,956	4,855
Vendor non-trade receivables	25,809	17,799
Other current assets	12,087	13,936
Total current assets	131,339	128,645
Non-current assets:		
Marketable securities	170,799	194,714
Property, plant and equipment, net	41,304	33,783
Other non-current assets	22,283	18,177
Total non-current assets	234,386	246,674
Total assets	\$ 365,725	\$ 375,319

Balance Sheet: 10-K (Liability and shareholders' Equity)



LIABILITIES AND SHAREHOLDERS' EQUITY:			
Current liabilities:			
Accounts payable	\$ 55,888	\$ 44,242	
Other current liabilities	32,687	30,551	
Deferred revenue	7,543	7,548	
Commercial paper	11,964	11,977	
Term debt	8,784	6,496	
Total current liabilities	116,866	100,814	
Non-current liabilities:			
Deferred revenue	2,797	2,836	
Term debt	93,735	97,207	
Other non-current liabilities	45,180	40,415	
Total non-current liabilities	141,712	140,458	
Total liabilities	258,578	241,272	
Commitments and contingencies			
Shareholders' equity:			
Common stock and additional paid-in capital, \$0.00001 par value: 12,600,000 shares authorized; 4,754,986 and 5,126,201 shares issued and outstanding, respectively	40,201	35,867	
Retained earnings	70,400	98,330	
Accumulated other comprehensive income/(loss)	(3,454)	(150)	
Total shareholders' equity	107,147	134,047	
Total liabilities and shareholders' equity	\$ 365,725	\$ 375,319	

Income Statement: 10-Q



	Three Months Ended		Nine Months Ended	
	June 29, 2019	June 30, 2018	June 29, 2019	June 30, 2018
Net sales:				
Products	\$ 42,354	\$ 43,095	\$ 162,354	\$ 173,546
Services	11,455	10,170	33,780	29,149
Total net sales	53,809	53,265	196,134	202,695
Cost of sales:				
Products	29,473	28,956	109,758	113,467
Services	4,109	3,888	12,297	11,473
Total cost of sales	33,582	32,844	122,055	124,940
Gross margin	20,227	20,421	74,079	77,755
Operating expenses:				
Research and development	4,257	3,701	12,107	10,486
Selling, general and administrative	4,426	4,108	13,667	12,489
Total operating expenses	8,683	7,809	25,774	22,975
Operating income	11,544	12,612	48,305	54,780
Other income/(expense), net	367	672	1,305	1,702
Income before provision for income taxes	11,911	13,284	49,610	56,482
Provision for income taxes	1,867	1,765	8,040	11,076
Net income	\$ 10,044	\$ 11,519	\$ 41,570	\$ 45,406
Earnings per share:				
Basic	\$ 2.20	\$ 2.36	\$ 8.92	\$ 9.07
Diluted	\$ 2.18	\$ 2.34	\$ 8.86	\$ 8.99
Shares used in computing earnings per share:				
Basic	4,570,633	4,882,167	4,660,175	5,006,640
Diluted	4,601,380	4,926,609	4,691,759	5,050,963

Statement of Cash Flows: 10-Q (Operating)



	Nine Months Ended	
	June 29, 2019	June 30, 2018
Cash, cash equivalents and restricted cash, beginning balances	\$ 25,913	\$ 20,289
Operating activities:		
Net income	41,570	45,406
Adjustments to reconcile net income to cash generated by operating activities:		
Depreciation and amortization	9,368	8,149
Share-based compensation expense	4,569	3,995
Deferred income tax benefit	(38)	(33,109)
Other	(340)	(410)
Changes in operating assets and liabilities:		
Accounts receivable, net	9,013	3,756
Inventories	496	(1,114)
Vendor non-trade receivables	13,483	5,536
Other current and non-current assets	693	(65)
Accounts payable	(19,804)	(10,410)
Deferred revenue	(776)	(73)
Other current and non-current liabilities	(8,753)	36,250
Cash generated by operating activities	49,481	57,911

Statement of Cash Flows: 10-Q (Investing)



	Nine Months Ended	
	June 29, 2019	June 30, 2018
Investing activities:		
Purchases of marketable securities	(21,902)	(56,133)
Proceeds from maturities of marketable securities	26,783	46,290
Proceeds from sales of marketable securities	49,516	41,614
Payments for acquisition of property, plant and equipment	(7,718)	(10,272)
Payments made in connection with business acquisitions, net	(611)	(431)
Purchases of non-marketable securities	(632)	(1,788)
Proceeds from non-marketable securities	1,526	310
Other	(268)	(523)
Cash generated by investing activities	46,694	19,067

Statement of Cash Flows: 10-Q (Financing)



	Nine Months Ended	
	June 29, 2019	June 30, 2018
Financing activities:		
Proceeds from issuance of common stock	391	328
Payments for taxes related to net share settlement of equity awards	(2,626)	(2,267)
Payments for dividends and dividend equivalents	(10,640)	(10,182)
Repurchases of common stock	(49,453)	(53,634)
Proceeds from issuance of term debt, net	—	6,969
Repayments of term debt	(5,500)	(6,500)
Repayments of commercial paper, net	(2,026)	(10)
Other	(83)	—
Cash used in financing activities	(69,937)	(65,296)

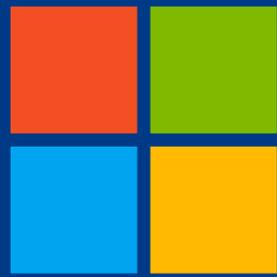
Valuation Ratios Comparisons



Key Statistics	Company	Industry	Comparison
Price/Earnings TTM	21.42	15.31	✗
Price/Book	11.58	4.12	✗
Price/Sales TTM	4.3	2.86	✗
Cash Flow Per Share	14.1	8.17	✓
Operating Margin % TTM	24.87%	23.12%	✓
Net Margin % TTM	22%	12.96%	✓
ROA TTM	16.26%	15.07%	✓
ROE TTM	51.65%	31.29%	✓
Debt/Equity	112.40%	53.27%	✗



BUY



Microsoft



Stock and Company Overview



Mission

- Advance human and organizational achievements



Mission

- Advance human and organizational achievements

Strategy

- Build best-in-class platforms and productivity services for a mobile-first, cloud-first world



MSFT

OCT 24, 2019

SEE REAL-TIME TRADES →

1D

5D

1M

6M

YTD

1Y

5Y

MAX



Nov '18 Dec '18 Jan '19 Feb '19 Mar '19 Apr '19 May '19 Jun '19 Jul '19 Aug '19 Sep '19 Oct '19

Summary Data

Exchange	NASDAQ-GS
Sector	Technology
Industry	Computer Software: Prepackaged Software
1 Year Target	\$159.00
Today's High/Low	\$141.14/\$139.20
Share Volume	25,694,304
50 Day Average Vol.	23,830,387
Previous Close	\$139.94
52 Week High/Low	\$142.37/\$93.96
Current Yield	1.3407%
Beta	1.33



Stock Information: 5-Year Performance

MSFT

OCT 24, 2019

SEE REAL-TIME TRADES →

1D 5D 1M 6M YTD 1Y 5Y MAX

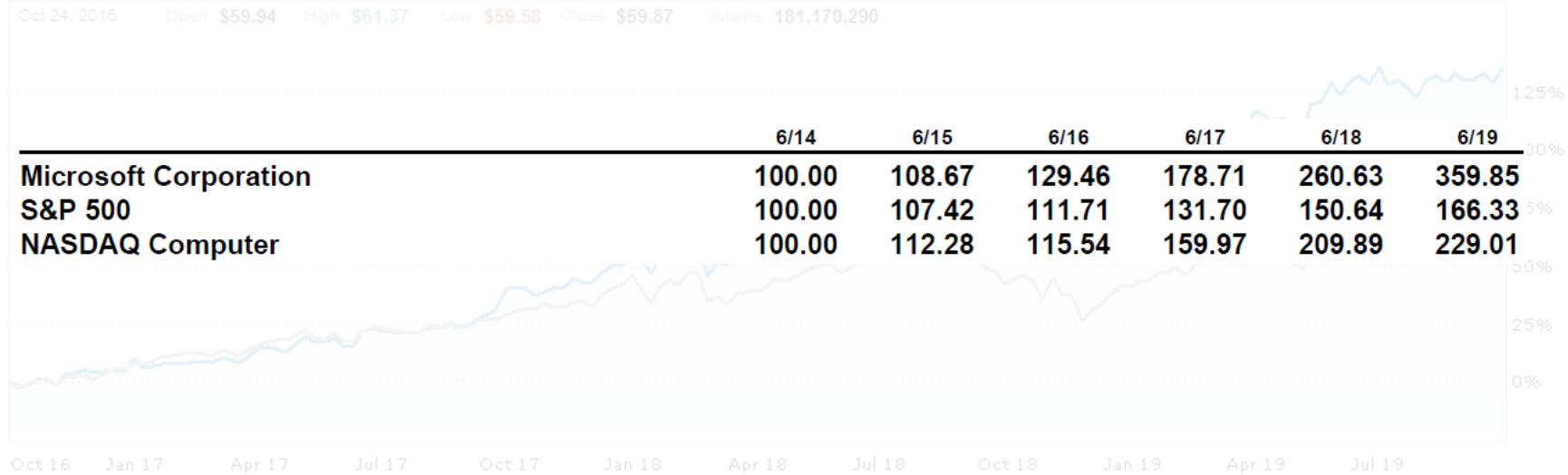


Performance Comparison to NASDAQ 100



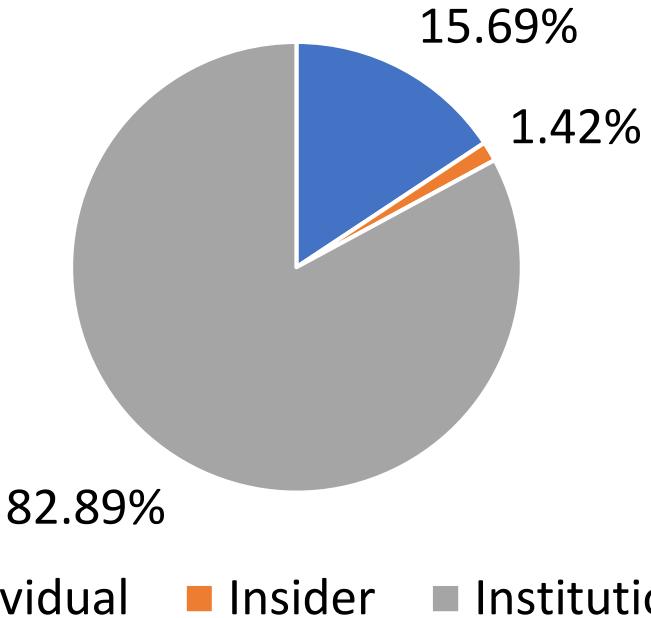
Comparison: QQQ (NASDAQ)

Performance Comparison





Stock Ownership



- Shares Outstanding: 7.70B
- Individual: 15.69%
- Insider: 1.42%
- Institutional: **82.89%**

Microsoft Share Ownership



Top 5 Owners of MSFT

Stockholder	Stake	Shares owned	Total value (\$)	Shares bought / sold	Total change
The Vanguard Group, Inc.	7.89%	602,101,376	83,710,154,305	+7,614,477	+1.28%
BlackRock Fund Advisors	4.44%	339,304,197	47,173,462,509	+2,991,462	+0.89%
SSgA Funds Management, Inc.	4.10%	313,098,610	43,530,099,748	-14,815	-0.00%
Fidelity Management & Research Co...	3.00%	229,036,520	31,842,947,376	-6,936,097	-2.94%
T. Rowe Price Associates, Inc. (I...	2.54%	194,055,628	26,979,553,961	+194,702	+0.10%

Microsoft Share Ownership



Top 5 Owners of MSFT

Stockholder	Stake	Shares owned	Total value (\$)	Shares bought / sold	Total change
The Vanguard Group, Inc.	7.89%	602,101,376	83,710,154,305	+7,614,477	+1.28%
BlackRock Fund Advisors	4.44%	339,304,197	47,173,462,509	+2,991,462	+0.89%
SSgA Funds Management, Inc.	4.10%	313,098,610	43,530,099,748	-14,815	-0.00%
Fidelity Management & Research Co...	3.00%	229,036,520	31,842,947,376	-6,936,097	-2.94%
T. Rowe Price Associates, Inc. (I...	2.54%	194,055,628	26,979,553,961	+194,702	+0.10%



Top Shareholders: Institutional Ownership

Top Institutional Holders

Holder	Shares	Date Reported	% Out	Value
Vanguard Group, Inc. (The)	538,998,598	Mar 30, 2017	6.98%	34,990,653,018
Blackrock Inc.	471,200,430	Mar 30, 2017	6.10%	30,589,338,839
Capital World Investors	337,753,411	Mar 30, 2017	4.37%	21,926,239,611
State Street Corporation	318,681,830	Mar 30, 2017	4.13%	20,688,152,767
Price (T.Rowe) Associates Inc	183,580,207	Mar 30, 2017	2.38%	11,917,640,135

- CWI no longer top 5 shareholder

Insider Ownership



Name	Common Stock ^{1,2}	Common Stock	Underlying Shares or Stock Units ^{3,4}	Total
William H. Gates III	102,992,9345	1.34%	0	102,992,934
Reid G. Hoffman	15,8056	*	8,189	23,994
Hugh F. Johnston	3,8997	*	0	3,899
Teri L. List-Stoll	3,398	*	0	3,398
Charles H. Noski	110,0938	*	0	110,093
Helmut Panke	53,965	*	0	53,965
Sandra E. Peterson	21,476	*	0	21,476
Penny S. Pritzker	17,2729	*	0	17,272
Charles W. Scharf	40,46710	*	0	40,467
Arne M. Sorenson	3,192	*	0	3,192
John W. Stanton	81,19811	*	0	81,198
John W. Thompson	35,45912	*	54,094	89,553
Emma N. Walmsley	0	*	0	0
Padmasree Warrior	13,188	*	0	13,188
Satya Nadella	951,502	*	1,456,918	2,408,420
Amy E. Hood	308,799	*	129,340	438,139
Jean-Philippe Courtois	830,54113	*	101,120	931,661
Margaret L. Johnson	317,72714	*	62,423	380,150
Bradford L. Smith	714,680	*	109,339	824,019
Directors and Executive Officers as a Group (20 people)	106,765,99315	1.39%	N/A	N/A

* Less than 1%



- Insider holding < 1.50%



Share Repurchase Program

Share Repurchases

On September 16, 2013, our Board of Directors approved a share repurchase program ("2013 Share Repurchase Program") authorizing up to \$40.0 billion in share repurchases. The 2013 Share Repurchase Program became effective on October 1, 2013, and was completed on December 22, 2016.

On September 20, 2016, our Board of Directors approved a share repurchase program authorizing up to an additional \$40.0 billion in share repurchases ("2016 Share Repurchase Program"). This share repurchase program commenced on December 22, 2016 following completion of the 2013 Share Repurchase Program, has no expiration date, and may be suspended or discontinued at any time without notice. As of June 30, 2019, \$11.4 billion remained of the 2016 Share Repurchase Program.

We repurchased the following shares of common stock under the share repurchase programs:

(In millions)	Shares	Amount	Shares	Amount	Shares	Amount
Year Ended June 30,		2019		2018		2017
First Quarter	24	\$ 2,600	22	\$ 1,600	63	\$ 3,550
Second Quarter	57	6,100	22	1,800	59	3,533
Third Quarter	36	3,899	34	3,100	25	1,600
Fourth Quarter	33	4,200	21	2,100	23	1,600
Total	150	\$ 16,799	99	\$ 8,600	170	\$ 10,283



History and Management



Development Timeline

1975

- Microsoft founded

1981

- Microsoft incorporates in Washington, USA
- IBM introduces its personal computer MS-DOS 1.0

1986

- **Initial public offering** with closing price, \$27.75

1990

- Launches Windows 3.0

1995

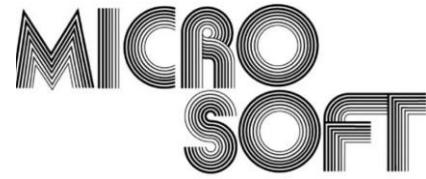
- Launches Windows 95

1998

- Launches Windows 98

2000

- Launches Windows 2000





Development Timeline

2001

- Launches Office XP and Xbox

2005

- Launches Xbox 360

2007

- Launches Windows Vista

2009

- **Launches Windows 7**

2010

- Launches Kinect for Xbox 360
- Launches Windows Phone 7

2011

- **Launches Office 365**
- **Acquires Skype: \$8.5B in cash**

2012

- Acquires Yammer: \$1.2B in cash
- Launches Windows 8



Development Timeline



2013

- Launches Office 2013
- Launches Outlook.com
- Launches Xbox One

2014

- **Satya Nadella named CEO**
- Launches Surface Pro 3

2015

- Launches Windows 10
- Launches Office 2016

2016

- **Acquires LinkedIn: \$26.2B in cash**



2018

- Acquires GitHub: \$7.5B stock

2019

- **Launches HoloLens2**
- **\$10B deal with Department of Defense**



Executive Compensation Program

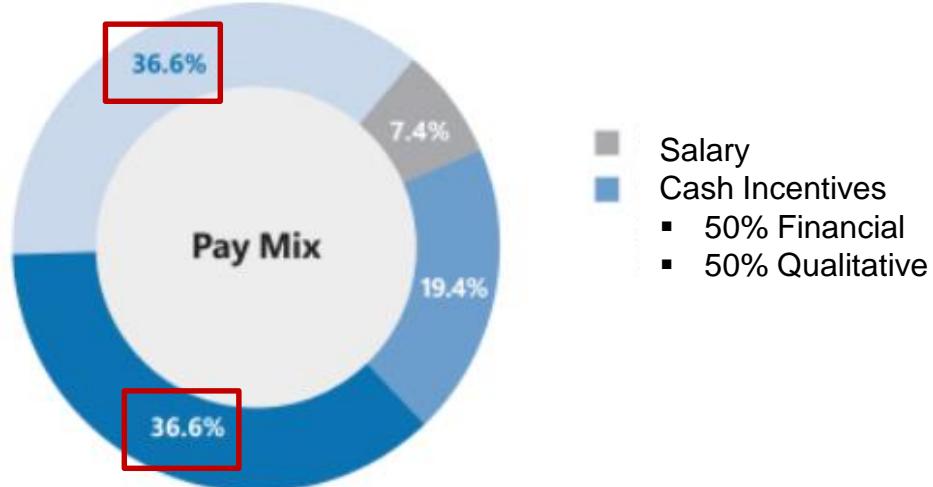


Fiscal Year 2019 Compensation Structure

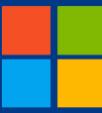
Microsoft's pay mix targets a high proportion of equity and performance-based compensation.

Stock Awards
Performance-Based Stock Awards

Over 70% of total compensation



Stock Ownership Requirements



Robust Stock Ownership Policy

Our executive officers and certain other senior executives are required to maintain a minimum equity stake in Microsoft. This policy embodies our Compensation Committee's belief that our most senior executives should maintain a significant personal financial stake in Microsoft to promote a long-term perspective in managing our business. In addition, the policy helps align executive and shareholder interests, which reduces incentive for excessive short-term risk taking. Each covered executive is required to acquire and maintain ownership of shares of Microsoft common stock equal to a specified multiple of his or her base salary, which ranges from 5 to 15 times base salary, as shown in the table below. Each covered executive must retain 50% of all net shares (post-tax) that vest until achieving his or her minimum share ownership requirement.

Named Executive	Share Ownership Requirement as of June 30, 2019
Satya Nadella	15x base salary
Amy E. Hood	8x base salary
Jean-Philippe Courtois	8x base salary
Margaret L. Johnson	5x base salary
Bradford L. Smith	8x base salary

FY 2019 Executive Compensation



Fiscal Year 2019 Compensation Tables

Summary Compensation Table

This table contains information about compensation awarded to our Named Executives for the fiscal years ended June 30, 2019, 2018, and 2017. None of our Named Executives received stock options during those years.

Named Executive and Principal Position	Year	Salary	Stock Awards ¹	Non-equity Incentive Plan Compensation ²		All Other Compensation ³ (\$)	Total (\$)
		(\$)	(\$)	(\$)			
Satya Nadella <i>Chief Executive Officer and Director</i>	2019	2,333,333	29,668,651	10,796,868	111,363	42,910,215	
	2018	1,500,000	16,807,208	7,425,000	111,055	25,843,263	
	2017	1,450,000	11,434,557	7,032,406	97,189	20,014,152	
Amy E. Hood <i>Executive Vice President and Chief Financial Officer</i>	2019	958,333	15,316,653	3,855,040	97,608	20,227,634	
	2018	875,000	10,232,265	3,718,750	98,442	14,924,457	
	2017	852,917	7,015,071	3,624,896	89,260	11,582,144	
Jean-Philippe Courtois⁴ <i>Executive Vice President, President, Global Sales, Marketing and Operations</i>	2019	798,000	11,309,474	2,889,049	88,231	15,084,754	
	2018	833,000	7,149,549	3,092,513	51,187	11,126,249	
	2017	751,054	14,735,464 ⁵	2,762,884	45,214	18,294,616	
Margaret L. Johnson <i>Executive Vice President, Business Development</i>	2019	715,000	7,539,668	2,086,456	91,525	10,432,649	
	2018	715,000	5,702,554	2,252,236	88,225	8,758,015	
	2017	715,000	3,907,922	2,168,795	89,238	6,880,955	
Bradford L. Smith <i>President and Chief Legal Officer</i>	2019	850,000	13,045,437	3,366,148	111,412	17,372,997	
	2018	800,000	9,033,868	3,566,700	111,055	13,511,623	
	2017	785,833	6,193,370	3,241,543	98,989	10,319,735	

Management Team



Satya Nadella, Chief Executive Officer (Joined 1992)

Satya Nadella is Chief Executive Officer of Microsoft. Before being named CEO in February 2014, Nadella held leadership roles in both enterprise and consumer businesses across the company. He is on Starbucks' board.

Information

- Bachelor's in electrical engineering at Mangalore University and MBA at University of Chicago
- Previously VP of Cloud and Enterprise group
- Total compensation in 2019: \$43MM



Management Team



John W. Thompson, Chairman (Joined 2012)

John W. Thompson joined the Microsoft Board in February 2012 and became independent chairman of Microsoft Corporation on February 4, 2014.

Information

- B.B.A. from Florida A&M University and master's degree in management science from MIT's Sloan School of Management
- 40 years of experience in the technology industry
- 10 years of experience as CEO of Symantec



Management Team



Bill Gates, Co-founder and Technology Advisor

William (Bill) H. Gates is founder, technology advisor and board member of Microsoft Corporation. He served as chairman of the board until February 4, 2014. He is on the Berkshire Hathaway's board.



Information

- Attended Harvard University but left university to devote his energy to Microsoft with Paul Allen
- Transitioned out of day-to-day role in 2008

Management Team



Kevin Scott, Chief Technology Officer (Joined 2012)

Kevin Scott has 20-years of experience in technology. He was a core member of LinkedIn until the acquisition.

Information

- M.S. in computer science at Wake Forest University and Ph. D. in computer science at University of Virginia
- Angel investor and advisor of multiple tech startups in Silicon Valley



Management Team



Amy Hood, Chief Financial Officer (Joined 2002)

Amy Hood is responsible for leading all finance activities at Microsoft including acquisitions, treasury, tax planning, and investor relations. Previously, she was deeply involved in executing the Skype and Yammer acquisitions.

Information

- Bachelor's degree in economics at Duke University and got her MBA at Harvard University
- Worked as an investment banker at Goldman Sachs & Co. for over eight years before coming to Microsoft
- Total compensation in 2019: \$20MM



Management Team



Chris Capossela, Chief Marketing Officer and Executive VP of Marketing and Consumer Business (Joined 1991)

As chief marketing officer, Chris Capossela oversees the Consumer and Device Sales team, Microsoft Advertising sales and stores. Responsible for driving revenue, growth, and market share within the consumer businesses

Information

- Harvard University computer science and economics graduate
- Oversaw creation of Windows, Office, and Xbox



Management Team



Scott Guthrie, Executive Vice President, Microsoft Cloud and Enterprise Group (Joined 1997)

As executive vice president of the Microsoft Cloud and Enterprise Group, Scott Guthrie is responsible for the company's cloud infrastructure, server, database, CRM, ERP, management and development tools businesses. His engineering team builds Microsoft Azure, SQL Server, Microsoft Dynamics 365, Active Directory, System Center, Visual Studio and .NET.

Information

- . Bachelor's degree in computer science from Duke University
- . Co-founder of the .NET project



Management Team



Kathleen Hogan, Chief People Officer (joined 2003)

Kathleen Hogan spends most of her time making sure that Microsoft is an exceptional place for employees to work. She believes that culture is essential in attracting and inspiring the world's most passionate talent. She is on the Alaska Air Group board.

Information

- Bachelor's degree in applied mathematics and economics at Harvard University. MBA from the Stanford University.
- Previously VP and COO of Worldwide Sales/Services
- Partner at McKinsey & Company and Development Manager at Oracle



Management Team

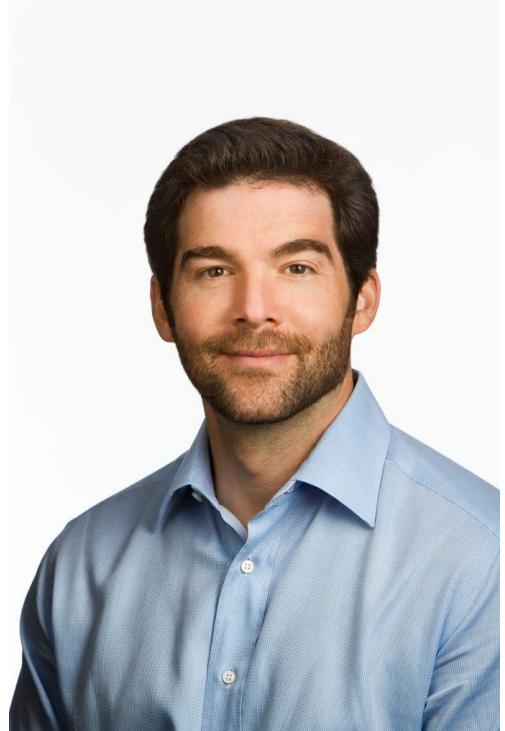


Jeff Weiner, CEO of LinkedIn

Jeff Weiner joined LinkedIn in December 2008 and has over 10 years of experience in leading the company. Revenue grew from \$78MM to \$5B during his tenure. He was

Information

- Bachelor's degree in economics at the University of Pennsylvania
- Executive of VP of Yahoo! Network Division
- Emphasizes compassionate leadership style





Product Portfolio



Productivity and Business Processes

- Products and services related to productivity, communication, and information services

Intelligent Cloud

- Public and private server products and cloud services intended for tech companies and developers

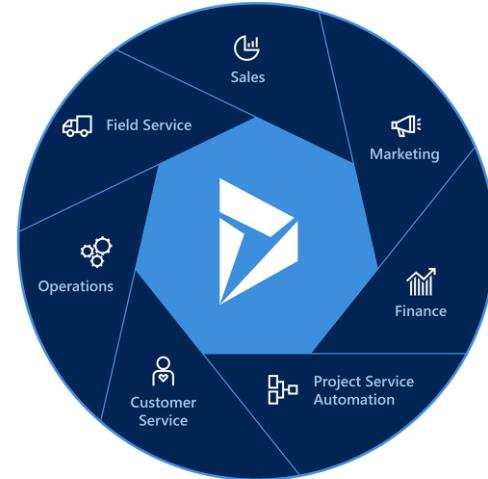
Personal Computing

- Products and services targeted to individuals

Productivity and Business Process



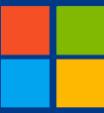
Office 365



Intelligent Cloud



More Personal Computing



Microsoft

Surface



bing





Operating Performance

Operating Performance by Segment FY19 10-K



Segment revenue and operating income were as follows during the periods presented:

(In millions)

Year Ended June 30,	2019	2018	2017
Revenue			
Productivity and Business Processes	\$ 41,160	\$ 35,865	\$ 29,870
Intelligent Cloud	38,985	32,219	27,407
More Personal Computing	45,698	42,276	39,294
Total	\$ 125,843	\$ 110,360	\$ 96,571
Operating Income (Loss)			
Productivity and Business Processes	\$ 16,219	\$ 12,924	\$ 11,389
Intelligent Cloud	13,920	11,524	9,127
More Personal Computing	12,820	10,610	8,815
Corporate and Other	0	0	(306)
Total	\$ 42,959	\$ 35,058	\$ 29,025

Operating Performance by Segment FY19 10-K



Segment revenue and operating income were as follows during the periods presented:

(In millions)

Year Ended June 30,		2019	2018	2017
Revenue				
Productivity and Business Processes		\$ 41,160	\$ 35,865	\$ 29,870
Intelligent Cloud		38,985	32,219	27,407
More Personal Computing		45,698	42,276	39,294
Total	Profit Margin	\$ 125,843	\$ 110,360	\$ 96,571
Operating Income (Loss)	2019	2018		
Productivity and Business Processes	39.40%		\$ 16,219	\$ 12,924
Intelligent Cloud	36.04%		13,920	11,524
More Personal Computing	35.71%		12,820	10,610
Corporate and Other	35.77%		0	(306)
Total	28.05%		\$ 42,959	\$ 35,058
	25.10%			\$ 29,025

Operating Performance by Segment FY19 10-K



Revenue from external customers, classified by significant product and service offerings, was as follows:

(In millions)

Year Ended June 30,	2019	2018	2017
Server products and cloud services	\$ 32,622	\$ 26,129	\$ 21,649
Office products and cloud services	31,769	28,316	25,573
Windows	20,395	19,518	18,593
Gaming	11,386	10,353	9,051
Search advertising	7,628	7,012	6,219
LinkedIn	6,754	5,259	2,271
Enterprise Services	6,124	5,846	5,542
Devices	6,095	5,134	5,062
Other	3,070	2,793	2,611
Total	<u>\$ 125,843</u>	<u>\$ 110,360</u>	<u>\$ 96,571</u>

Operating Performance by Segment FY19 10-K



Revenue from external customers, classified by significant product and service offerings, was as follows:

(In millions)

Year Ended June 30,	Annualized Growth	2019	2018	2017
Server products and cloud services	22.75%	\$ 32,622	\$ 26,129	\$ 21,649
Office products and cloud services	11.46%	31,769	28,316	25,573
Windows		20,395	19,518	18,593
Gaming	4.73%	11,386	10,353	9,051

4 products/services^{12.16%} drive 76% of revenues

Operating Performance by Segment FY19 10-K

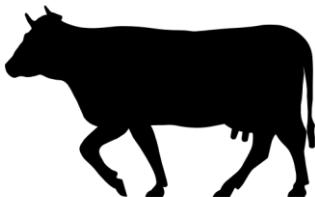


Revenue from external customers, classified by significant product and service offerings, was as follows:

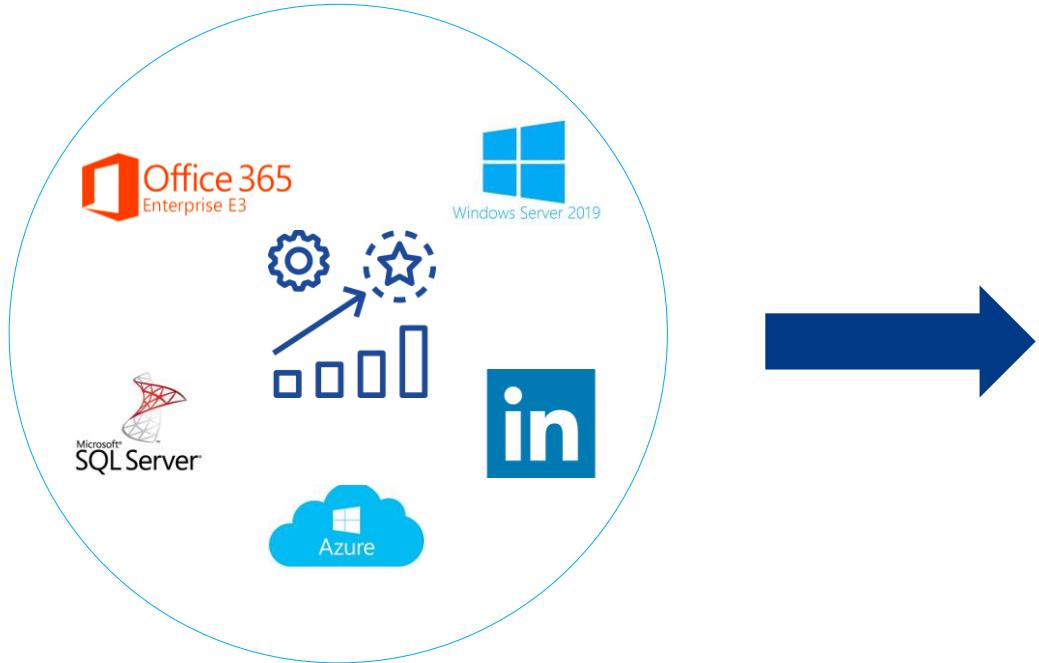
(In millions)

Year Ended June 30,	Annualized Growth	2019	2018	2017
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Office products and cloud services	11.46 %	31,769	28,316	25,573
Windows		20,395	19,518	18,593
Gaming	4.73%	11,386	10,353	9,051

4 products/services^{12.16%} drive 76% of revenues



Operating Performance: Summary



Commercial Products and Services are the Core Drivers of Growth

% of total revenue

- 2019: **30.27%**
- 2018: **24.10%**
- 2017: **16.78%**

Operating Performance: Productivity and Business Processes



- Office Commercial products and cloud services revenue **grew 13%**; driven by Office 365 Commercial revenue growth of 25%



- LinkedIn revenue **grew 25%**; driven by increase in engagement and job postings



Microsoft
Dynamics 365

- Dynamics products and cloud services **revenue grew 14%**; driven by Dynamics 365 revenue growth of 41%



- Azure revenue **grew 59%**; driven by growth in user base

Operating Performance: More Personal Computing



Windows 10 Pro

- Windows 10 OEM Pro revenue **grew 19%**; driven by strong demand due to end of Windows 7 support

msn bing

- Search advertising revenue **grew 11%**; driven by higher revenue per search

Operating Performance: More Personal Computing



Windows 10 Pro

- Windows 10 OEM Pro revenue **grew 19%**; driven by strong demand due to end of Windows 7 support



- Search advertising revenue **grew 11%**; driven by higher revenue per search



- Windows 10 OEM non-Pro revenue **declined 7%**
- Surface revenue **declined 4%**
- Gaming revenue **declined 7%**



Financial Analysis

Financial Highlights



(In millions, except per share amounts)

Year Ended June 30,	2019 ^(a)	2018	2017 ^{(d)(e)}	2016 ^(d)	2015
Revenue	\$ 125,843	\$ 110,360	\$ 96,571	\$ 91,154	\$ 93,580
Gross margin	82,933	72,007	62,310	58,374	60,542
Operating income	42,959	35,058	29,025 ^(f)	26,078 ^(g)	18,161 ^(h)
Net income	39,240 ^(b)	16,571 ^(c)	25,489 ^(f)	20,539 ^(g)	12,193 ^(h)
Diluted earnings per share	5.06 ^(b)	2.13 ^(c)	3.25 ^(f)	2.56 ^(g)	1.48 ^(h)
Cash dividends declared per share	1.84	1.68	1.56	1.44	1.24
Cash, cash equivalents, and short-term investments	133,819	133,768	132,981	113,240	96,526
Total assets	286,556	258,848	250,312	202,897	174,303
Long-term obligations	114,806	117,642	106,856	66,705	44,574
Stockholders' equity	102,330	82,718	87,711	83,090	80,083

Income Statement: FY19 10-K



INCOME STATEMENTS

(In millions, except per share amounts)

Year Ended June 30,	2019	2018	2017
Revenue:			
Product	\$ 66,069	\$ 64,497	\$ 63,811
Service and other	59,774	45,863	32,760
Total revenue	125,843	110,360	96,571
Cost of revenue:			
Product	16,273	15,420	15,175
Service and other	26,637	22,933	19,086
Total cost of revenue	42,910	38,353	34,261
Gross margin	82,933	72,007	62,310
Research and development	16,876	14,726	13,037
Sales and marketing	18,213	17,469	15,461
General and administrative	4,885	4,754	4,481
Restructuring	0	0	306
Operating income	42,959	35,058	29,025
Other income, net	729	1,416	876
Income before income taxes	43,688	36,474	29,901
Provision for income taxes	4,448	19,903	4,412
Net income	\$ 39,240	\$ 16,571	\$ 25,489

Income Statement: FY19 10-K



INCOME STATEMENTS

(In millions, except per share amounts)

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INCOME STATEMENTS

(In millions, except per share amounts)

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↑ 65.90% ↑ 65.25% 64.52%

Income Statement: FY19 10-K



INCOME STATEMENTS

(In millions, except per share amounts)

Year Ended June 30,	2019	2018	2017
Revenue:			
Product	\$ 66,069	\$ 64,497	\$ 63,811
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Operating income	42,959	35,058	29,025
Other income, net	729	1,416	876
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Provision for income taxes	↓ 4,448	↑ 19,903	4,412
Net income	\$ 39,240	\$ 16,571	\$ 25,489

Income Statement: FY20 10-Q



INCOME STATEMENTS

(In millions, except per share amounts) (Unaudited)

Three Months Ended September 30,	2019	2018
Revenue:		
Product	\$ 15,768	\$ 17,299
Service and other	17,287	11,785
Total revenue	33,055	29,084
Cost of revenue:		
Product	3,305	3,649
Service and other	7,101	6,256
Total cost of revenue	10,406	9,905
Gross margin	22,649	19,179
Research and development	4,565	3,977
Sales and marketing	4,337	4,098
General and administrative	1,061	1,149
Operating income	12,686	9,955
Other income, net	0	266
Income before income taxes	12,686	10,221
Provision for income taxes	2,008	1,397
Net income	\$ 10,678	\$ 8,824

Income Statement: FY20 10-Q



INCOME STATEMENTS

(In millions, except per share amounts) (Unaudited)

Three Months Ended September 30,

2019 2018

Revenue:

Product

\$ 15,768 \$ 17,299

Service and other

17,287 11,785

Total revenue

33,055 29,084

Cost of revenue:

Product

3,305 3,649

Service and other

7,101 6,256

Total cost of revenue

10,406 9,905

Gross margin

22,649 19,179

↑ 68.52% 65.94%

Balance Sheet: FY20 10-Q



BALANCE SHEETS

(In millions) (Unaudited)

	September 30, 2019	June 30, 2019
Assets		
Current assets:		
Cash and cash equivalents	\$ 13,117	\$ 11,356
Short-term investments	123,519	122,463
Total cash, cash equivalents, and short-term investments	136,636	133,819
Accounts receivable, net of allowance for doubtful accounts of \$303 and \$411	19,087	29,524
Inventories	2,622	2,063
Other current assets	7,551	10,146
Total current assets	165,896	175,552
Property and equipment, net of accumulated depreciation of \$36,971 and \$35,330	38,409	36,477
Operating lease right-of-use assets	7,890	7,379
Equity investments	2,684	2,649
Goodwill	42,113	42,026
Intangible assets, net	7,508	7,750
Other long-term assets	14,455	14,723
Total assets	\$ 278,955	\$ 286,556

Balance Sheet: FY20 10-Q



Liabilities and stockholders' equity

Current liabilities:

Accounts payable	\$ 8,574	\$ 9,382
Current portion of long-term debt	3,017	5,516
Accrued compensation	4,676	6,830
Short-term income taxes	3,440	5,665
Short-term unearned revenue	29,904	32,676
Other current liabilities	8,507	9,351
Total current liabilities	58,118	69,420
Long-term debt	66,478	66,662
Long-term income taxes	28,457	29,612
Long-term unearned revenue	4,122	4,530
Deferred income taxes	234	233
Operating lease liabilities	6,659	6,188
Other long-term liabilities	8,826	7,581
Total liabilities	172,894	184,226

Commitments and contingencies

Stockholders' equity:

Common stock and paid-in capital – shares authorized 24,000; outstanding 7,634

and 7,643

Retained earnings

Accumulated other comprehensive loss

Total stockholders' equity

Total liabilities and stockholders' equity

78,882 78,520

27,240 24,150

(61) (340)

106,061 102,330

\$ 278,955 \$ 286,556

Balance Sheet: FY19 10-K



BALANCE SHEETS

(In millions)

June 30,

2019

2018

Assets

Current assets:

Cash and cash equivalents	\$ 11,356	\$ 11,946
Short-term investments	122,463	121,822

Total cash, cash equivalents, and short-term investments	133,819	133,768
--	---------	---------

Accounts receivable, net of allowance for doubtful accounts of \$411 and \$377	29,524	26,481
--	--------	--------

Inventories	2,063	2,662
-------------	-------	-------

Other	10,146	6,751
-------	--------	-------

Total current assets	175,552	169,662
----------------------	---------	---------

Property and equipment, net of accumulated depreciation of \$35,330 and \$29,223	36,477	29,460
--	--------	--------

Operating lease right-of-use assets	7,379	6,686
-------------------------------------	-------	-------

Equity investments	2,649	1,862
--------------------	-------	-------

Goodwill	42,026	35,683
----------	--------	--------

Intangible assets, net	7,750	8,053
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Other long-term assets	14,723	7,442
------------------------	--------	-------

Total assets	\$ 286,556	\$ 258,848
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Balance Sheet: FY19 10-K



Liabilities and stockholders' equity

Current liabilities:

Accounts payable	\$ 9,382	\$ 8,617
Current portion of long-term debt	5,516	3,998
Accrued compensation	6,830	6,103
Short-term income taxes	5,665	2,121
Short-term unearned revenue	32,676	28,905
Other	9,351	8,744
Total current liabilities	69,420	58,488
Long-term debt	66,662	72,242
Long-term income taxes	29,612	30,265
Long-term unearned revenue	4,530	3,815
Deferred income taxes	233	541
Operating lease liabilities	6,188	5,568
Other long-term liabilities	7,581	5,211
Total liabilities	184,226	176,130

Commitments and contingencies

Stockholders' equity:

Common stock and paid-in capital – shares authorized 24,000; outstanding 7,643 and 7,677	78,520	71,223
Retained earnings	24,150	13,682
Accumulated other comprehensive loss	(340)	(2,187)
Total stockholders' equity	102,330	82,718
Total liabilities and stockholders' equity	\$ 286,556	\$ 258,848

Cash Flows: FY19 10-K (Operations)



CASH FLOWS STATEMENTS

(In millions)

Year Ended June 30,	2019	2018	2017
Operations			
Net income	\$ 39,240	\$ 16,571	\$ 25,489
Adjustments to reconcile net income to net cash from operations:			
Depreciation, amortization, and other	11,682	10,261	8,778
Stock-based compensation expense	4,652	3,940	3,266
Net recognized gains on investments and derivatives	(792)	(2,212)	(2,073)
Deferred income taxes	(6,463)	(5,143)	(829)
Changes in operating assets and liabilities:			
Accounts receivable	(2,812)	(3,862)	(1,216)
Inventories	597	(465)	50
Other current assets	(1,718)	(952)	1,028
Other long-term assets	(1,834)	(285)	(917)
Accounts payable	232	1,148	81
Unearned revenue	4,462	5,922	3,820
Income taxes	2,929	18,183	1,792
Other current liabilities	1,419	798	356
Other long-term liabilities	591	(20)	(118)
Net cash from operations	↑ 52,185	↑ 43,884	39,507

Cash Flows: FY19 10-K (Financing)



CASH FLOWS STATEMENTS

(In millions)

Year Ended June 30,	2019	2018	2017
Financing			
Repayments of short-term debt, maturities of 90 days or less, net	0	(7,324)	(4,963)
Proceeds from issuance of debt	0	7,183	44,344
Repayments of debt	(4,000)	(10,060)	(7,922)
Common stock issued	1,142	1,002	772
Common stock repurchased	↑ (19,543)	↓ (10,721)	(11,788)
Common stock cash dividends paid	(13,811)	(12,699)	(11,845)
Other, net	(675)	(971)	(190)
Net cash from (used in) financing	(36,887)	(33,590)	8,408

Cash Flows: FY19 10-K (Financing)



CASH FLOWS STATEMENTS

(In millions)

Year Ended June 30,	2019	2018	2017
Financing			
Repayments of short-term debt, maturities of 90 days or less, net	0	(7,324)	(4,963)
Proceeds from issuance of debt	0	7,183	44,344
Repayments of debt	(4,000)	(10,060)	(7,922)
Common stock issued	1,142	1,002	772
Common stock repurchased	(19,543)	(10,721)	(11,788)
Common stock cash dividends paid	(13,811)	(12,699)	(11,845)
	↑ 58.59%	↓ 45.78%	49.88%

Cash Flows: FY19 10-K (Investing)



CASH FLOWS STATEMENTS

(In millions)

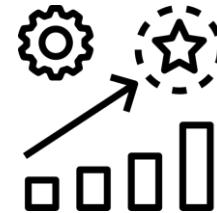
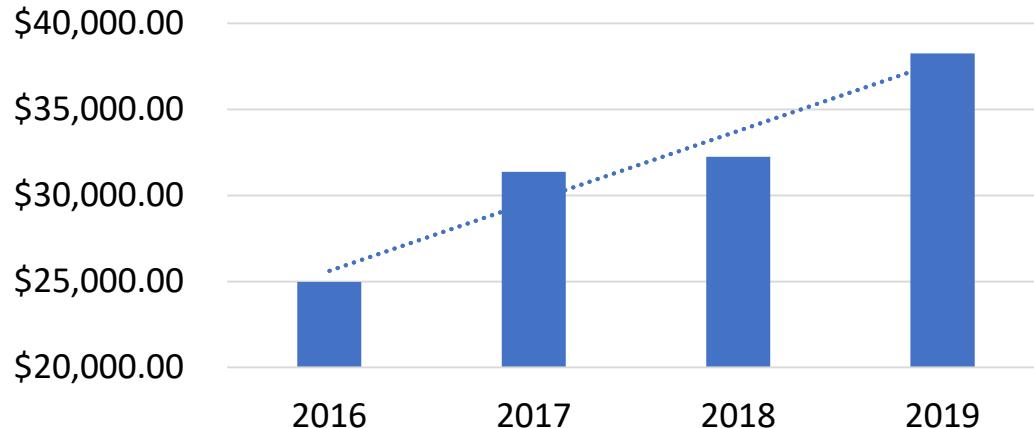
Year Ended June 30,	2019	2018	2017
Investing			
Additions to property and equipment	(13,925)	(11,632)	(8,129)
Acquisition of companies, net of cash acquired, and purchases of intangible and other assets	(2,388)	(888)	(25,944)
Purchases of investments	(57,697)	(137,380)	(176,905)
Maturities of investments	20,043	26,360	28,044
Sales of investments	38,194	117,577	136,350
Securities lending payable	0	(98)	(197)
Net cash used in investing	(15,773)	(6,061)	(46,781)
Effect of foreign exchange rates on cash and cash equivalents	(115)	50	19
Net change in cash and cash equivalents	(590)	4,283	1,153
Cash and cash equivalents, beginning of period	11,946	7,663	6,510
Cash and cash equivalents, end of period	<u>\$ 11,356</u>	<u>\$ 11,946</u>	<u>\$ 7,663</u>

Free Cash Flow Trend



In Millions (USD)

FCF 4-Year Trend



- CAGR of 11.24%
- Healthy increase in cash from operations

Cash Flows: FY20 10-Q (Operations)



CASH FLOWS STATEMENTS

(In millions) (Unaudited)

Three Months Ended September 30,

2019 2018

Operations

Net income \$ 10,678 \$ 8,824

Adjustments to reconcile net income to net cash from operations:

Depreciation, amortization, and other 2,971 2,837

Stock-based compensation expense 1,262 1,107

Net recognized losses (gains) on investments and derivatives 11 (240)

Deferred income taxes (177) (247)

Changes in operating assets and liabilities:

Accounts receivable 10,090 9,194

Inventories (561) (956)

Other current assets (438) (677)

Other long-term assets (333) 21

Accounts payable (547) (395)

Unearned revenue (2,892) (2,441)

Income taxes (3,336) (1,091)

Other current liabilities (3,320) (2,322)

Other long-term liabilities 410 43

Net cash from operations

13,818 13,657

Cash Flows: FY20 10-Q (Financing)

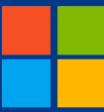


CASH FLOWS STATEMENTS

(In millions) (Unaudited)

Three Months Ended September 30,	2019	2018
Financing		
Repayments of debt	(2,500)	0
Common stock issued	427	360
Common stock repurchased	(4,912)	(3,744)
Common stock cash dividends paid	(3,510)	(3,220)
Other, net	286	(780)
 Net cash used in financing	 (10,209)	 (7,384)

Cash Flows: FY20 10-Q (Financing)



CASH FLOWS STATEMENTS

(In millions) (Unaudited)

Three Months Ended September 30,	2019	2018
Financing		
Repayments of debt	(2,500)	0
Common stock issued	427	360
Common stock repurchased	(4,912)	(3,744)
Common stock cash dividends paid	(3,510)	(3,220)
	↑ 58.32%	53.76%

Cash Flows: FY20 10-Q (Investing)



CASH FLOWS STATEMENTS

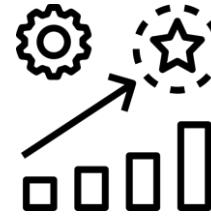
(In millions) (Unaudited)

Three Months Ended September 30,	2019	2018
Investing		
Additions to property and equipment	(3,385)	(3,602)
Acquisition of companies, net of cash acquired, and purchases of intangible and other assets	(462)	(245)
Purchases of investments	(23,390)	(19,551)
Maturities of investments	19,082	5,214
Sales of investments	6,379	15,231
Net cash used in investing	(1,776)	(2,953)
Effect of foreign exchange rates on cash and cash equivalents	(72)	(129)
Net change in cash and cash equivalents	1,761	3,191
Cash and cash equivalents, beginning of period	11,356	11,946
Cash and cash equivalents, end of period	\$ 13,117	\$ 15,137

10-Year Pentagon Deal: \$10B

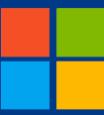


10-Year Deal: \$10B



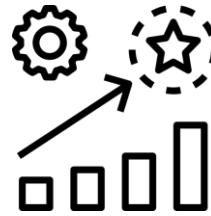
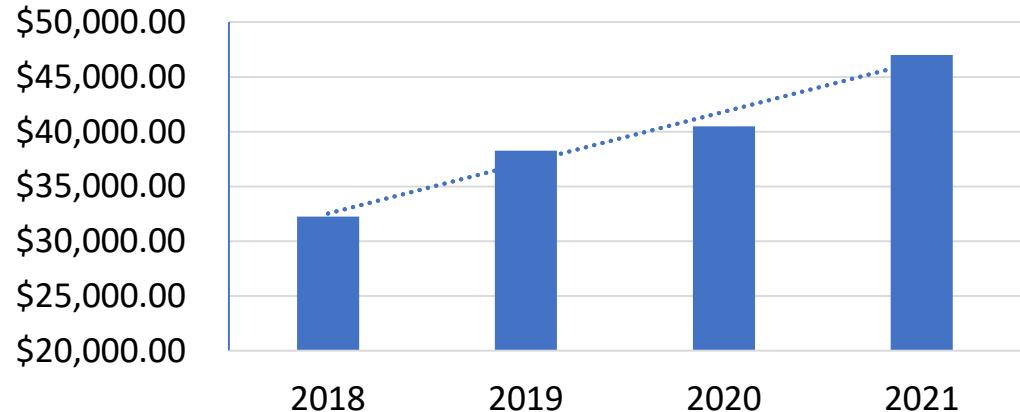
- First government deal
- Additional FCF available for developing Azure

FCF Forecast: FY20 & FY21



In Millions of USD

FCF 4-Year Trend



- CAGR of 9.87%
- Continued growth in cloud services

Stock Forecast: 12-Month Target



Showing 38 of 42 sources

	Firm	Analyst	Recommendation	Tgt Px	Date	1 Yr Rtn	BARR	Rank
1	J.P. Morgan	Mark R Murphy	overweight	169	10/28/19	36.94%	1	11
2	Bernstein	Mark L Moerdler	outperform	167	10/28/19	36.94%	1	6
3	William Blair & Co	Jason Noah Ader	outperform		10/28/19	36.94%	1	
4	Griffin Securities	Jay Vleeschhouwer	buy	162	10/28/19	36.94%	1	3
5	Mizuho Securities U...	Gregg Moskowitz	buy	160	10/28/19			
6	Morningstar, Inc	Daniel J Romanoff	hold	155	10/28/19			
7	Atlantic Equities LLP	James Cordwell	overweight	160	10/28/19	36.94%	1	
8	Barclays	Raimo Lenschow	overweight	155	10/28/19	36.94%	1	
9	Deutsche Bank	Karl Keirstead	buy	160	10/27/19	36.94%	1	5
10	RBC Capital Markets	Alex Zukin	outperform	163	10/27/19			

Stock Forecast: 12-Month Target



- Driver of the growth is **cloud services**
- Ability to continue growing shown by **\$10B government deal**

Stock Forecast: 12-Month Target



- Driver of the growth is **cloud services**
- Ability to continue growing shown by \$10B **government deal**
- MSFT will **outperform** in the sector

Recommendation: in progress



BUY



Google



Stock and Company Overview

Stock Information



Alphabet Inc. (GOOG)

NasdaqGS - NasdaqGS Real Time Price. Currency in USD

 Add to watchlist

Visitors trend 2W ↑ 10W ↑ 9M ↑

1,265.13 +4.14 (+0.33%)

At close: 4:00PM EDT

[Buy](#)

Sell

Summary

Company Outlook

Chart

Conversation

Statistics

Historical Data

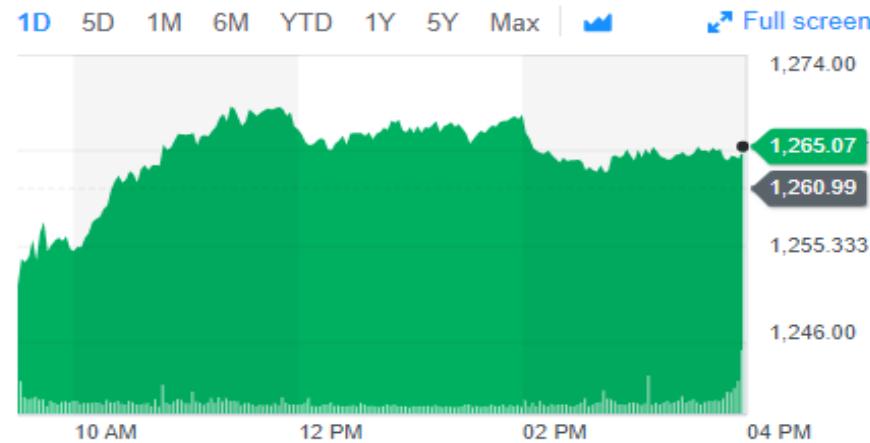
Profile

Financials NEW

Analysis

Options

Previous Close	1,260.99	Market Cap	876.586B
Open	1,251.03	Beta (3Y Monthly)	0.94
Bid	1,266.20 x 800	PE Ratio (TTM)	25.54
Ask	1,269.99 x 1200	EPS (TTM)	49.53
Day's Range	1,250.01 - 1,269.45	Earnings Date	N/A
52 Week Range	970.11 - 1,289.27	Forward Dividend & Yield	N/A (N/A)
Volume	1,213,051	Ex-Dividend Date	N/A
Avg. Volume	1,344,326	1y Target Est	1,442.90



Stock Information: 1 Year Performance



Market Summary > Alphabet Inc Class A
NASDAQ: GOOGL

+ Follow

1,264.30 USD **+5.19 (0.41%)**

Closed: Oct. 25, 7:56 p.m. EDT - [Disclaimer](#)

After hours 1,270.00 **+5.70 (0.45%)**

1 day

5 days

1 month

6 months

YTD

1 year

5 years

Max



Open	1,252.00
High	1,268.00
Low	1,249.15
Mkt cap	877.19B
P/E ratio	28.93

Div yield	-
Prev close	1,259.11
52-wk high	1,296.98
52-wk low	977.66

Stock Information: 5 Year Performance



Market Summary > Alphabet Inc Class A

NASDAQ: GOOGL

+ Follow

1,264.30 USD **+5.19 (0.41%)**

Closed: Oct. 25, 7:56 p.m. EDT · Disclaimer

After hours 1,270.00 **+5.70 (0.45%)**

1 day 5 days 1 month 6 months YTD 1 year 5 years **5 years** Max



Open	1,252.00
High	1,268.00
Low	1,249.15
Mkt cap	877.19B
P/E ratio	28.93

Div yield	-
Prev close	1,259.11
52-wk high	1,296.98
52-wk low	977.66

Stock Information: Max Performance



Market Summary > Alphabet Inc Class A
NASDAQ: GOOGL

+ Follow

1,264.30 USD **+5.19 (0.41%)** ↑

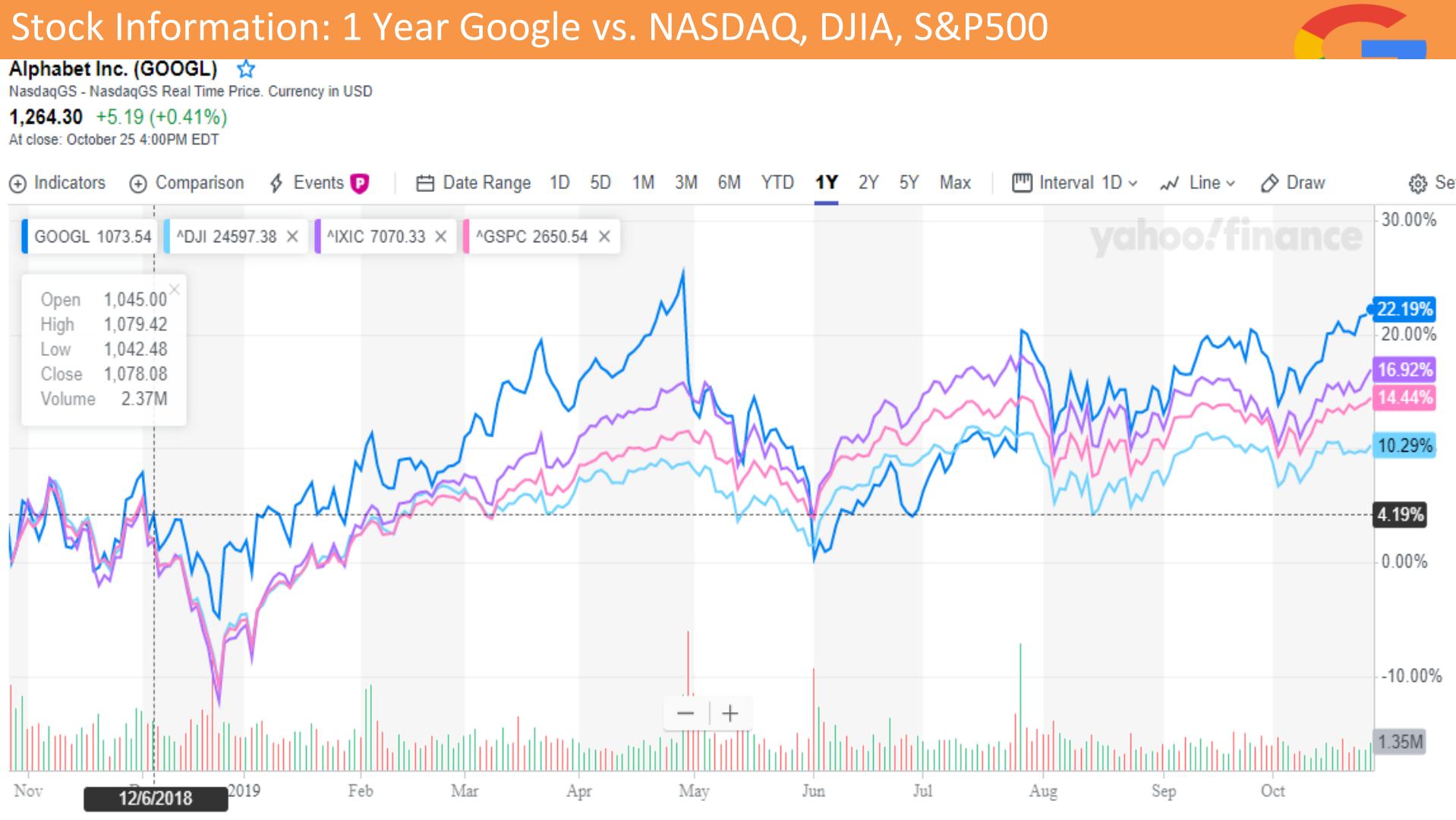
Closed: Oct. 25, 7:56 p.m. EDT · Disclaimer
After hours 1,270.00 +5.70 (0.45%)

1 day 5 days 1 month 6 months YTD 1 year 5 years Max



Open	1,252.00
High	1,268.00
Low	1,249.15
Mkt cap	877.19B
P/E ratio	28.93

Div yield	-
Prev close	1,259.11
52-wk high	1,296.98
52-wk low	977.66



Stock Information: 5 Year Google vs. NASDAQ, DJIA, S&P500

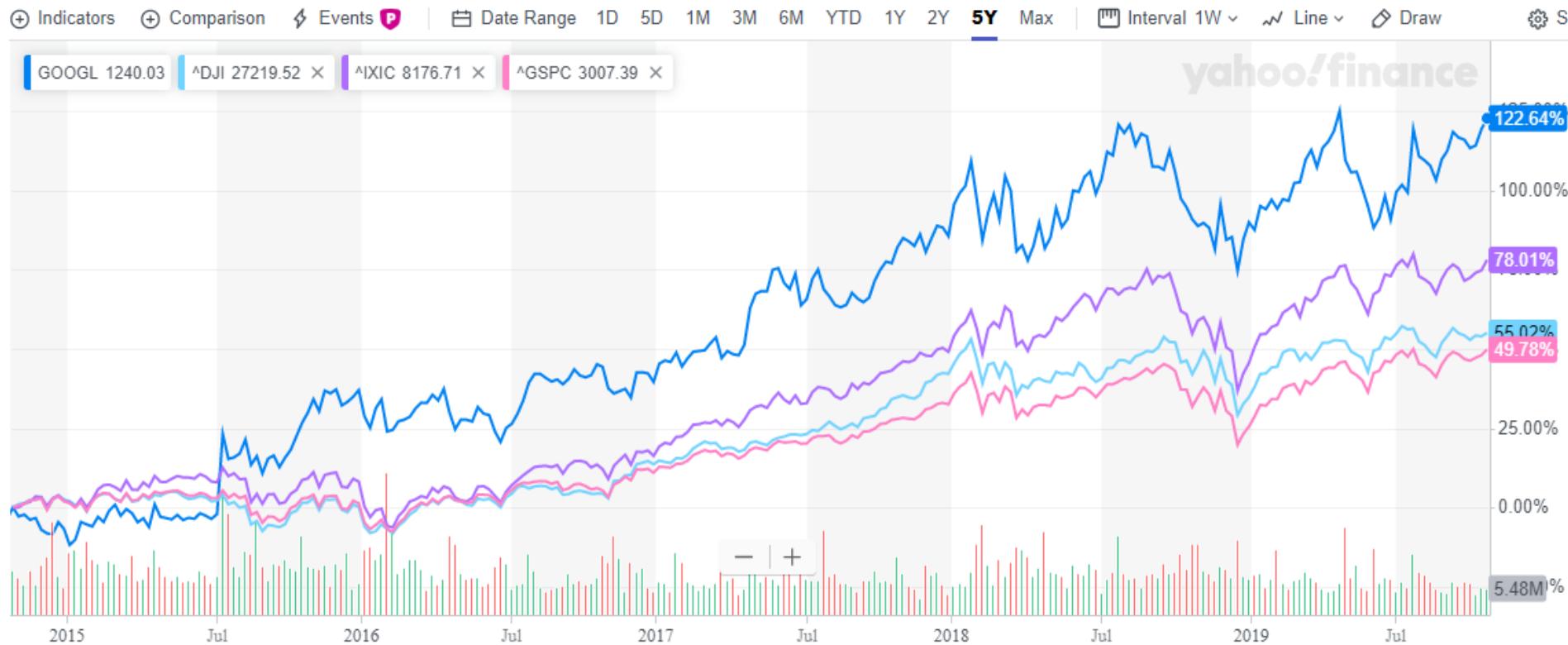


Alphabet Inc. (GOOGL) ☆

NasdaqGS - NasdaqGS Real Time Price. Currency in USD

1,264.30 +5.19 (+0.41%)

At close: October 25 4:00PM EDT



Common Share Outstanding



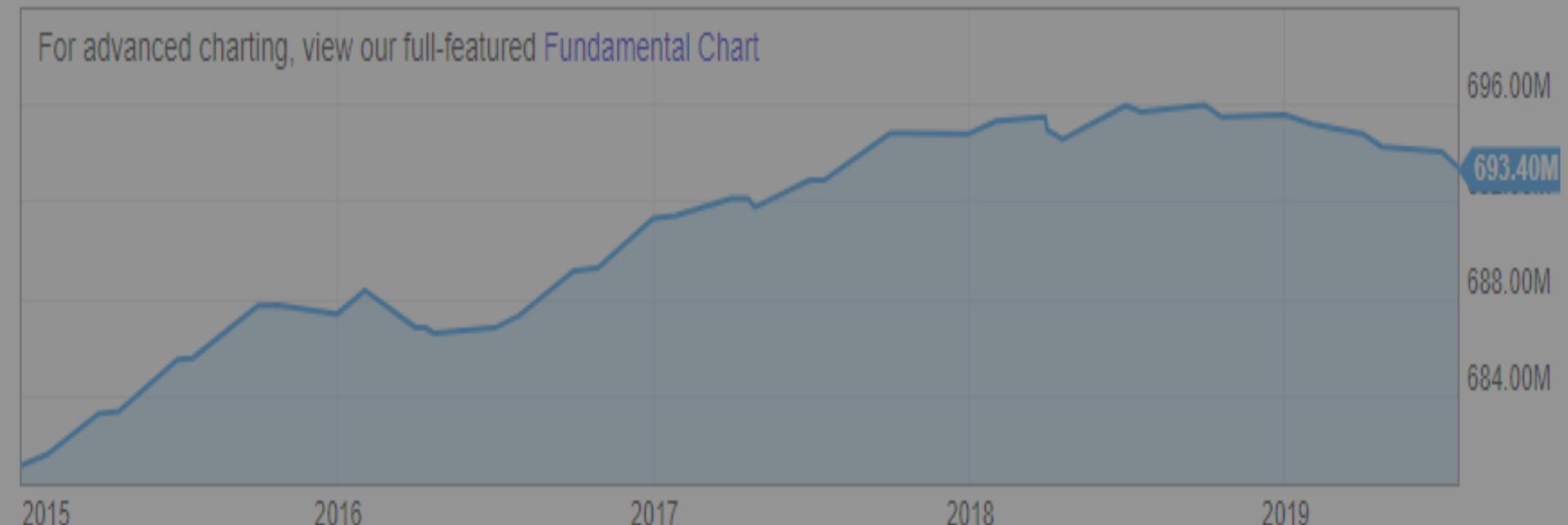
Shares Outstanding Chart

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Common Share Structure (cont'd)

Common Shares Outstanding: **693.4m** (Balance as of October 28, 2019)

- Anyone who owned Google stock before the split got one share of the voting GOOGL stock and one share of the non-voting GOOG stock.
- There are also Class B shares of Google stock, however they do not trade in the public market, but are owned by Google insiders and each get ten votes.

Class A (GOOGL) **299.53m** shares of the registrant's Class A common stock

- Listed on the NASDAQ Global Select Market since August 19, 2004
- 1 vote per share

Class B **46.44** shares of the registrant's Class B common stock outstanding

- 10 votes per share
- Only available to Google insiders and executives

Class C (GOOG) **347.34m** shares of the registrant's Class C capital stock outstanding.

- Listed on the NASDAQ Global Select Market since April 3, 2014
- No voting rights: maintain control of Google's direction

Top Shareholders': Institutional Ownership (GOOG)



2,474 Institutional Holders

240,548,813 Total Shares Held

OWNER NAME	DATE	SHARES HELD	CHANGE (SHARES)	CHANGE (%)	VALUE (IN 1,000\$)
VANGUARD GROUP INC	06/30/2019	22,708,312	259,979	1.158%	\$28,728,967
BLACKROCK INC.	06/30/2019	20,205,186	612,804	3.128%	\$25,562,187
STATE STREET CORP	06/30/2019	11,682,902	40,178	0.345%	\$14,780,390
PRICE T ROWE ASSOCIATES INC /MD/	06/30/2019	11,480,467	674,924	6.246%	\$14,524,283
FMR LLC	06/30/2019	8,856,977	-599,669	-6.341%	\$11,205,227
CAPITAL INTERNATIONAL INVESTORS	06/30/2019	4,371,094	338,885	8.404%	\$5,530,002

Top Shareholders': Institutional Ownership (GOOGL)



2,677 Institutional Holders

240,355,629 Total Shares Held

OWNER NAME	DATE	SHARES HELD	CHANGE (SHARES)	CHANGE (%)	VALUE (IN 1,000\$)
VANGUARD GROUP INC	06/30/2019	22,536,432	302,354	1.36%	\$28,492,811
BLACKROCK INC.	06/30/2019	19,108,158	332,906	1.773%	\$24,158,444
FMR LLC	06/30/2019	14,089,887	-1,204,029	-7.873%	\$17,813,844
STATE STREET CORP	06/30/2019	11,574,993	83,250	0.724%	\$14,634,264
PRICE T ROWE ASSOCIATES INC /MD/	06/30/2019	6,928,208	-163,259	-2.302%	\$8,759,333
INVESCO LTD.	06/30/2019	4,752,079	1,285,824	37.095%	\$6,008,053

Net Income Per Share Class



	Three Months Ended June 30,					
	2018			2019		
	Class A	Class B	Class C	Class A	Class B	Class C
Basic net income per share:						
Numerator						
Allocation of undistributed earnings	\$ 1,371	\$ 216	\$ 1,608	\$ 4,286	\$ 667	\$ 4,994
Denominator						
Number of shares used in per share computation	298,264	46,915	349,756	299,035	46,525	348,409
Basic net income per share	<u>\$ 4.60</u>	<u>\$ 4.60</u>	<u>\$ 4.60</u>	<u>\$ 14.33</u>	<u>\$ 14.33</u>	<u>\$ 14.33</u>
Diluted net income per share:						
Numerator						
Allocation of undistributed earnings for basic computation	\$ 1,371	\$ 216	\$ 1,608	\$ 4,286	\$ 667	\$ 4,994
Reallocation of undistributed earnings as a result of conversion of Class B to Class A shares	216	0	0	667	0	0
Reallocation of undistributed earnings	(16)	(3)	16	(36)	(6)	36
Allocation of undistributed earnings	<u>\$ 1,571</u>	<u>\$ 213</u>	<u>\$ 1,624</u>	<u>\$ 4,917</u>	<u>\$ 661</u>	<u>\$ 5,030</u>
Denominator						
Number of shares used in basic computation	298,264	46,915	349,756	299,035	46,525	348,409
Weighted-average effect of dilutive securities						
Add:						
Conversion of Class B to Class A common shares outstanding	46,915	0	0	46,525	0	0
Restricted stock units and other contingently issuable shares	713	0	7,599	453	0	5,532
Number of shares used in per share computation	<u>345,892</u>	<u>46,915</u>	<u>357,355</u>	<u>346,013</u>	<u>46,525</u>	<u>353,941</u>
Diluted net income per share	<u>\$ 4.54</u>	<u>\$ 4.54</u>	<u>\$ 4.54</u>	<u>\$ 14.21</u>	<u>\$ 14.21</u>	<u>\$ 14.21</u>

Revenue by Geographic Region



	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2018	2019	2018	2019
United States	46%	46%	46%	46%
EMEA	33%	32%	33%	32%
APAC	15%	17%	15%	17%
Other Americas	6%	5%	6%	5%

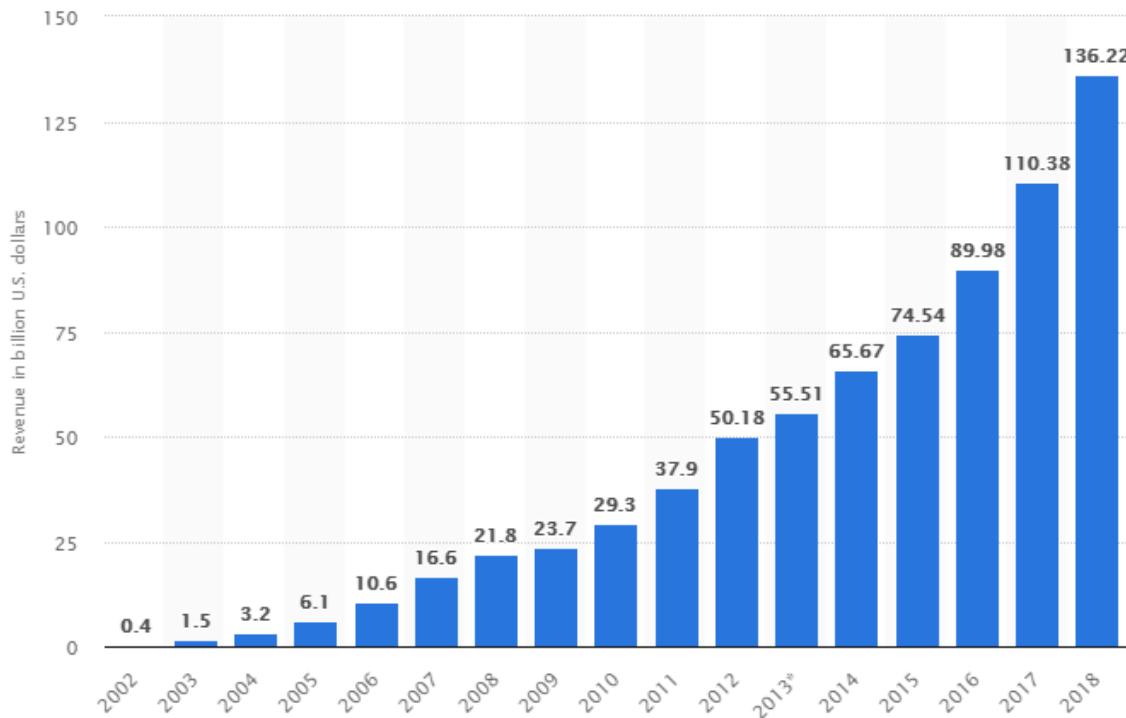
EMEA- Europe, Middle East, Africa

APAC- Asia Pacific

Revenue Growth Last 10 Years



Google's revenue worldwide from 2002 to 2018 (in bill)





Revenues

The following table presents our revenues, by segment and revenue source (in millions, unaudited):

	Three Months Ended		Six Months Ended	
	June 30,	2019	June 30,	2019
Google segment				
Google properties revenues	\$ 23,262	\$ 27,335	\$ 45,260	\$ 53,017
Google Network Members' properties revenues	4,825	5,266	9,469	10,304
Google advertising revenues	28,087	32,601	54,729	63,321
Google other revenues	4,425	6,181	8,779	11,630
Google segment revenues	32,512	38,782	63,508	74,951
Other Bets				
Other Bets revenues	145	162	295	332
Revenues	\$ 32,657	\$ 38,944	\$ 63,803	\$ 75,283

Google Segment Revenues



Google segment

The following table presents our Google segment revenues (in millions, unaudited):

	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2018	2019	2018	2019
Google segment revenues	\$ 32,512	\$ 38,782	\$ 63,508	\$ 74,951
Google segment revenues as a percentage of total revenues	99.6%	99.6%	99.5%	99.6%

Google Network Member's Properties



Google Network Members' properties

The following table presents our Google Network Members' properties revenues (in millions, unaudited) and changes in our impressions and cost-per-impression (expressed as a percentage):

	Three Months Ended		Six Months Ended	
	June 30, 2018	2019	June 30, 2018	2019
Google Network Members' properties revenues	\$ 4,825	\$ 5,266	\$ 9,469	\$ 10,304
Google Network Members' properties revenues as a percentage of Google segment revenues	14.8%	13.6 %	14.9%	13.7 %
Impressions change		11 %		8 %
Cost-per-impression change		(1)%		— %

Google Network Members' properties revenues consist primarily of advertising revenues generated from advertisements served on Google Network Members' properties participating in:

- AdMob;
- AdSense (such as AdSense for Content, AdSense for Search, etc.); and
- Google Ad Manager.



Google other revenues

The following table presents our Google other revenues (in millions, unaudited):

	Three Months Ended		Six Months Ended	
	June 30, 2018	2019	June 30, 2018	2019
Google other revenues	\$ 4,425	\$ 6,181	\$ 8,779	\$ 11,630
Google other revenues as a percentage of Google segment revenues	13.6%	15.9%	13.8%	15.5%

Google other revenues consist primarily of revenues from:

- Apps, in-app purchases, and digital content in the Google Play store;
- Google Cloud offerings;
- Hardware; and
- YouTube subscriptions.

Our Google other revenues increased \$1,756 million and \$2,851 million from the three and six months ended June 30, 2018 to the three and six months ended June 30, 2019, respectively. The growth was primarily driven by revenues from Google Cloud offerings as well as revenues from Google Play, largely relating to in-app purchases (revenues which we recognize net of payout to developers).



History and Management

Google's History



1996 Larry and Sergey collaborate and create search engine called BackRub. BackRub operates on Stanford servers for. BackRub featured an efficient algorithm called "PageRank"

1997 Google.com is registered as a domain on September 15. The name—a play on the word "googol," a mathematical term for the number represented by the numeral 1 followed by 100 zeroes

1998 Andy Bechtolsheim becomes first investor (\$100,000), and Google files for incorporation in California

1999 Venture capital firms Kleiner Perkins Caufield & Byers and Sequoia Capital provide \$25 million; Website officially launched

2000 Google AdWords launched (paid web links with associated searches)
The first 10 language versions of Google.com are released: French, German, Italian, Swedish, Finnish, Spanish, Portuguese, Dutch, Norwegian and Danish.
Google Toolbar is released—a browser plug-in that makes it possible to search without visiting the Google homepage.

2001 Eric Schmidt becomes CEO and Chairman of the Board of Directors; "PageRank" granted a patent
Open their first international office, in Tokyo, Japan.

2002 Google labs, Google Scholar released,.. AdWords becomes cost-per-click
Google News launches with 4,000 news sources.

Google's History (Cont.)



2003 Acquire Pyra Labs, the creators of Blogger.
Announce Google AdSense, a new content-targeted advertising service that enables publishers large and small to access Google's vast network of advertisers.
Launch Google Grants—the nonprofit edition of AdWords and launch Google Print

2004 Google Local released (became Google Maps), Gmail released, IPO raised \$1.67 billion for of 19,605,052 shares of Class A common stock at \$85
Acquire Keyhole, a digital mapping company whose technology will later become Google Earth. Also launch Google Scholar in beta

2005 Google Maps, two months later, add satellite views and directions to the product.
Google Earth launched
Google Mobile Web Search is released, specially formulated for viewing search results on mobile phones. Google Analytics also released.

2006 Google Finance launches.

2007 Share prices hit \$700

2009 Release Google Voice. Announce Google Ventures

Google's History (Cont.)



2011

Larry Page takes over as CEO. Eric Schmidt becomes executive chairman. Android exceeds 10 billion app downloads, growth rate of 1 billion downloads per month, Google Drive launched. Announce Chromebooks.

2012

Chrome launches on Android and iOS. Google is the dominant search engine globally with 88.8% market share, Most visited website in the world. Project Glass is unveiled. Google Drive launches.

2013

Google Play music is released. Android passes 1 billion device activations. Announce Calico, a new company that focuses on health and well-being.

2014

Prototypes of self-driving cars revealed. Sold Motorola Mobility to Lenovo for \$2.91bn.

2015

In October, Alphabet Inc. was founded as the parent company of Google and several other companies

2016

Announced the Google Station initiative to make public Wi-Fi around the world, with initial development in India.

Released multiple hardware devices (Google Pixel smartphone and DayDream Virtual Reality Headset).

2017

Sundar Pichai appointed to board of directors. Eric Schmidt transitions to technical advisor. Android reaches over 2 billion monthly active devices.

Google's History (Cont.)



2018

European Commission fines Google \$4.34 billion for infringing on competition laws.

Key Acquisitions



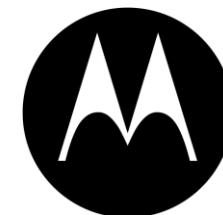
April 2003: Applied Semantics (AdSense and AdWords) - 102m



October 2004: Keyhole Corp. (Google Maps/ Google Earth)



August 2005: Android 50m – Mobile Software



October 2006: YouTube - 1.65B – Video sharing

April 2007: Double Click - 3.1B – Online Advertising



November 2009: AdMob - 750m – Mobile Advertising

August 2011: Motorola 12.5B – Mobile Device Manufacturer

September 2011: Zagat 151m – Restaurant reviews

During 2012:

- Meebo: Web-based instant messaging service (\$100M)
- Sparrow: Email client for iOS and OSX devices (\$25M)
- Wildfire: Social marketing software developer (\$450M)
- Quickoffice: Productivity suite for Google Docs and smart devices.

March 2013: DNNresearch Inc. 5m – Neural Networks

May 2013: Makani Power 30m – Clean Energy

Key Acquisitions (Cont.)



June 2013: Waze 966m –Navigation Software



December 2013: Boston Dynamics 500m - Robotics



January 2014: DeepMind Technologies 650m – Artificial Intelligence

February 2014: Nest 3.2B – Home Automation

April 2014: Titan Aerospace 60m – Drones and UAVS

June 2014: Skybox Imaging – 500m - Satellite



July 2014: Dropcam – 517m – Home Monitoring



September 2017: HTC - 1.1B- Consumer Electronics



June 2019: Looker- 2.6B - Analytics and Business Intelligence



As of October 2019 , Google as acquired over 200 companies.

Company Overview



- Focused on improving the ways people connect with information
- Organize the world's information and make it universally accessible and useful.
- Innovations in **web search** and **advertising** have made their website a top internet property and their brand one of the most recognized in the world.
- Revenues primarily by delivering relevant, cost-effective **online advertising**.
- Google's **AdWords** program and **AdSense** program to promote their products and services with advertising



Products and Services – For All



Products and Services – For All



- Google Play
- Google Play Apps
- Google Play Games
- Google Play Movies & TV
- Google Play Newsstand
- Google Store
- Google Sync
- Google Wi-Fi
- Google for Education
- Google+
- Hangouts
- Inbox by Gmail
- Keep
- Maps
- News
- Nexus
- Nik Collection
- OnHub
- Photos
- Pixel
- Project Fi
- Scholar
- Search
- Sheets
- Sites
- Slides
- SmartBox
- Tango
- Tilt Brush
- Translate
- Voice
- Waze
- YouTube
- YouTube Gaming
- YouTube Kids
- Zagat
- Google Home/Nest

Products and Services: For Business



- AdMob
- AdSense
- AdWords
- AdWords Express
- Analytics
- Android for Work
- Blogger
- Chrome for Work
- DoubleClick by Google
- G Suite
- Google Cloud Platform
- Google Domains
- Google Maps Business View
- Google Maps for Work
- Google Merchant Center
- Google My Business
- Google Search for Work
- Google Shopping Campaigns
- Google Surveys
- Google Tag Manager
- Google Trends
- Google Trusted Stores
- Google Web Designer
- Google+ Brands
- Local Inventory Ads
- Search Console





Google Products and Services

Web-based products

Search Tools, Advertising Services, Communication Tools, Security Tools, Map Tools, Statistical Tools, ...

Operating systems

Android, Chrome OS, Google TV, Android TV, Android Wear, ...

Desktop Applications

Chrome, Google Earth, Picasa, Android Studio, ...



Mobile Applications

Drive, Gmail, Google+, Maps, Talk, Google Play, Google+, ...

Hardware

Driverless Car, Nexus, Chromebook, Google Glass, ...

Services

Crisis Response, Google Fiber, Google Ideas, Person Finder, ...



- Advertisers create ads to show alongside Google search results
- Advertisers “bid” in an auction to have their ads displayed alongside certain specific keywords
 - Pay per click
 - Cost-per-thousand
- Advertisers create ads to show alongside Google search results
 - Consists of 1 headline, 25 characters
 - 2 text lines, 35 characters each
- Advertisers may bid on certain specific keywords to have their ads displayed alongside
 - Cost-per-impression (CPM)
 - Cost-per-click (CPC)



vancouver cars



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Used Cars in BC

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+300.000 Vehicles on autoTRADER.ca



- Google partnerships with publishers within Google Network Members, who sell the ad space of their websites
- Ads are shown on publishers' websites in terms of relevancy to their products
- Google shares profits with the website publishers
 - Per click
 - Per impression

Products : Google Search Engine



- Most popular and widely used search engine in the world
- More than 2.3 million google searches a minute.
- Uses over 200 factors into account before delivering your results in 1/8th of a second.
- About 80% of the search engine market share is taken by Google



Products : Google Chrome



- A free web-based web browser
- First released in 2008 for windows then later ported to Linux, macOS, iOS and Android
- Google Chrome accounts for a 62% share of the worldwide usages of web browsers
- Most popular browser for smartphones
- Google Chromes success has led to an expansions of the brand name “Chrome” to various products



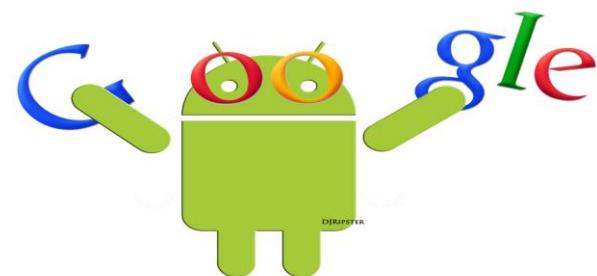
Chrome



- Mobile operating system designed primarily for touchscreen mobile devices
- Further developed for televisions, cars and wrist watches
- Captured 87.5% of the market share for mobile OS in 2016
- 9 out of 10 smartphones run Android OS

List of Android Versions

- Cupcake, Donut, Éclair, Froyo
- Gingerbread, Honeycomb, Ice Cream Sandwich
- Jelly Bean, KitKat, Lollipop, Marshmallow



Products: Smart Home



- Smart home products marketed by Google Nest
- Various offerings such as thermostats, home assistants, and streaming devices
- Aiming to promote the entirely smart home





- The standard for online video watching
- Has over 1 billion users – almost one-third of all internet users
- 9% of U.S small businesses use YouTube for marketing purposes
- Google aims to monetize video content by leveraging partnerships in the mobile space





Alphabet



is for Google



- Alphabet is the parent company of Google (introduced in 2015)
- Same founders as Google
- Includes other companies:
 - Access, Calico, CapitalG, GV, Nest, Verily, Waymo, X



COURTESY: GOOGLE

Lawrence Edward Page, Chief Executive Officer & Director at Alphabet Inc. (since October 2015, Co-founded Google in 1998)

- Directors of Google Inc., since its inception in 1998.
- Formally CEO of Google Inc. from September 1998 to July 2001.
- Served as President of Products at Alphabet Inc. from July 2001 to April 2011
- Member of the National Advisory Committee (NAC) for the University of Michigan College of Engineering.
- Previous served roles with Chips & Technologies Inc.
- Education: Bachelors in Computer Engineering from University of Michigan; Masters in computer science from Stanford University.



Sergey Mikhaylovich Brin, President & Director of Alphabet Inc. (since October 2015, co-founded Google in 1998)

- Director of Google Inc. since 1998
- Formally President of Google Inc. from September 1998 to July 2011.
- Then served as Google's President of Technology from July 2001 until April, 2011
- Published more than a dozen academic papers
- Research interests include search engines, information extraction from unstructured sources and data mining of large text collections and scientific data.
- Education: Bachelors in Mathematics and Computer Science from University of Maryland; Masters in Computer Science from Stanford.



Sundar Pichai, Chief Executive Officer of Google Inc. (since August 2015, joined Google in April 2004)

- Previously the Senior Vice President of products at Google from 2008 to August 2015.
- Originally worked on the Google search toolbar, Google Gears and Google Pack
- Convinced Google to launch its own browser, Google Chrome, in 2008. It became the No.1 browser in the world.
- Previous served roles with Applied Materials Inc., McKinsey & Company and Jive Software Inc.
- Education: Bachelors in Metallurgical Engineering at Indian Institute of Technology Kharagpur; Masters in Business administration at the Wharton School of the University of Pennsylvania; Masters of Science degree in materials, science and engineering from Stanford.

Executive Team



Ruth M. Porat, Chief Financial Officer & Senior Vice President at Alphabet Inc.
(since October 2015, joined company in 2015)

- Chief Financial Officer and Senior Vice President at Google Inc. since May, 2015.
- Lead Banker on numerous milestone technology financing rounds, including for Amazon, eBay, Netscape, Priceline and Verisign as well as for The Blackstone Group, GE and the NYSE.
- Member of the U.S. Treasury's Borrowing Advisory Committee
- Previous served roles with Morgan Stanley, Financial Sponsors Group, and Speyer Properties LP
- Education: Bachelors of Economics and Internal relations from Stanford; Masters in Business Administration from the Wharton School at the University of Pennsylvania; Masters in Economics from the London School of Economics.





Philipp Schindler: Senior Vice President and Chief Business Officer (Since August 2015)

- oversees all global and regional sales activities for Google and YouTube, the global technical and consumer operations, the product-sales strategy and go-to-market teams across all monetization products, and the partnership teams for Android and Chrome
- Prior to joining Google, Philipp was a Senior Vice President at AOL Germany, running the company's marketing and sales activities and serving as a member of their management board for six years. Within this capacity, Philipp was responsible for one of the largest marketing and sales budgets in the country and developed a range of major sales partnerships
- Philipp earned a Diplom Kaufmann degree with distinction from the European Business School (EBS) in Oestrich-Winkel, Germany.





David C. Drummond, Secretary, Chief Legal Officer & Senior Vice President of Alphabet, Inc. (since August 2015, joined Google in April 2004)

- Leads Google's global teams for legal, government relations, corporate development and new business development.
- Worked with co-founders of Google to incorporate the company and secure its initial round of financing.
- Brought his expertise of working with technology companies on complex mergers, acquisitions and initial public offerings
- Previous served roles with SmartForce PLC, Wilson Sonsini Goodrich and Rosati PC
- Education: Bachelors of Arts at Santa Clara University; JD from Stanford Law School.

Financial Analysis



Balance Sheet:10-Q (Assets)



	As of December 31, 2018	As of June 30, 2019
--	----------------------------	------------------------

Assets

Current assets:

Cash and cash equivalents	\$ 16,701	\$ 16,587
Marketable securities	92,439	104,469
Total cash, cash equivalents, and marketable securities	109,140	121,056
Accounts receivable, net of allowance of \$729 and \$721	20,838	20,965
Income taxes receivable, net	355	352
Inventory	1,107	964
Other current assets	4,236	4,100
Total current assets	135,676	147,437
Non-marketable investments	13,859	12,112
Deferred income taxes	737	585
Property and equipment, net	59,719	64,891
Operating lease assets	0	9,713
Intangible assets, net	2,220	1,902
Goodwill	17,888	18,000
Other non-current assets	2,693	2,461
Total assets	<u>\$ 232,792</u>	<u>\$ 257,101</u>

Balance Sheet: 10-Q(Liabilities and Shareholder Equity)



	As of December 31, 2018	As of June 30, 2019
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 4,378	\$ 3,925
Accrued compensation and benefits	6,839	6,432
Accrued expenses and other current liabilities	16,958	19,823
Accrued revenue share	4,592	4,567
Deferred revenue	1,784	1,717
Income taxes payable, net	69	536
Total current liabilities	34,620	37,000
Long-term debt	4,012	4,074
Deferred revenue, non-current	396	387
Income taxes payable, non-current	11,327	10,969
Deferred income taxes	1,264	1,892
Operating lease liabilities	0	9,088
Other long-term liabilities	3,545	1,499
Total liabilities	55,164	64,909
Stockholders' equity:		
Convertible preferred stock, \$0.001 par value per share, 100,000 shares authorized; no shares issued and outstanding	0	0
Class A and Class B common stock, and Class C capital stock and additional paid-in capital, \$0.001 par value per share: 15,000,000 shares authorized (Class A 9,000,000, Class B 3,000,000, Class C 3,000,000); 695,556 (Class A 299,242, Class B 46,636, Class C 349,678) and 694,050 (Class A 299,520, Class B 46,522, Class C 348,008) shares issued and outstanding	45,049	47,937
Accumulated other comprehensive loss	(2,306)	(1,091)
Retained earnings	134,885	145,346
Total stockholders' equity	177,628	192,192
Total liabilities and stockholders' equity	\$ 232,792	\$ 257,101

Balance Sheet:10-K (Assets)



	As of December 31, 2017	As of December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	\$ 10,715	\$ 16,701
Marketable securities	91,156	92,439
Total cash, cash equivalents, and marketable securities	101,871	109,140
Accounts receivable, net of allowance of \$674 and \$729	18,336	20,838
Income taxes receivable, net	369	355
Inventory	749	1,107
Other current assets	2,983	4,236
Total current assets	124,308	135,676
Non-marketable investments	7,813	13,859
Deferred income taxes	680	737
Property and equipment, net	42,383	59,719
Intangible assets, net	2,692	2,220
Goodwill	16,747	17,888
Other non-current assets	2,672	2,693
Total assets	<u><u>\$ 197,295</u></u>	<u><u>\$ 232,792</u></u>

Balance Sheet: 10-K(Liabilities and Shareholder Equity)



	As of December 31, 2018	As of June 30, 2019
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 3,137	\$ 4,378
Accrued compensation and benefits	4,581	6,839
Accrued expenses and other current liabilities	10,177	16,958
Accrued revenue share	3,975	4,592
Deferred revenue	1,432	1,784
Income taxes payable, net	881	69
Total current liabilities	<u>24,183</u>	<u>34,620</u>
Long-term debt	3,969	4,012
Deferred revenue, non-current	340	396
Income taxes payable, non-current	12,812	11,327
Deferred income taxes	430	1,264
Other long-term liabilities	3,059	3,545
Total liabilities	<u>44,793</u>	<u>55,164</u>
Commitments and Contingencies (Note 9)		
Stockholders' equity:		
Convertible preferred stock, \$0.001 par value per share, 100,000 shares authorized; no shares issued and outstanding	0	0
Class A and Class B common stock, and Class C capital stock and additional paid-in capital, \$0.001 par value per share: 15,000,000 shares authorized (Class A 9,000,000, Class B 3,000,000, Class C 3,000,000); 694,783 (Class A 298,470, Class B 46,972, Class C 349,341) and 695,556 (Class A 299,242, Class B 46,636, Class C 349,678) shares issued and outstanding	40,247	45,049
Accumulated other comprehensive loss	(992)	(2,306)
Retained earnings	113,247	134,885
Total stockholders' equity	<u>152,502</u>	<u>177,628</u>
Total liabilities and stockholders' equity	\$ 197,295	\$ 232,792

Income Statement: 10-Q



	Three Months Ended		Six Months Ended	
	June 30,		June 30,	
	2018	2019	2018	2019
Revenues	\$ 32,657	\$ 38,944	\$ 63,803	\$ 75,283
Costs and expenses:				
Cost of revenues	13,883	17,296	27,350	33,308
Research and development	5,114	6,213	10,153	12,242
Sales and marketing	3,780	4,212	7,384	8,117
General and administrative	1,764	2,043	3,167	4,131
European Commission fines	5,071	0	5,071	1,697
Total costs and expenses	29,612	29,764	53,125	59,495
Income from operations	3,045	9,180	10,678	15,788
Other income (expense), net	1,170	2,967	4,080	4,505
Income before income taxes	4,215	12,147	14,758	20,293
Provision for income taxes	1,020	2,200	2,162	3,689
Net income	\$ 3,195	\$ 9,947	\$ 12,596	\$ 16,604

Basic net income per share of Class A and B common stock and Class C capital stock

\$ 4.60 \$ 14.33 \$ 18.13 \$ 23.91

Diluted net income per share of Class A and B common stock and Class C capital stock

\$ 4.54 \$ 14.21 \$ 17.89 \$ 23.71



Alphabet Inc.
CONSOLIDATED STATEMENTS OF INCOME
(In millions, except per share amounts)

	Year Ended December 31,		
	2016	2017	2018
Revenues	\$ 90,272	\$ 110,855	\$ 136,819
Costs and expenses:			
Cost of revenues	35,138	45,583	59,549
Research and development	13,948	16,625	21,419
Sales and marketing	10,485	12,893	16,333
General and administrative	6,985	6,872	8,126
European Commission fines	0	2,736	5,071
Total costs and expenses	66,556	84,709	110,498
Income from operations	23,716	26,146	26,321
Other income (expense), net	434	1,047	8,592
Income before income taxes	24,150	27,193	34,913
Provision for income taxes	4,672	14,531	4,177
Net income	\$ 19,478	\$ 12,662	\$ 30,736

Basic net income per share of Class A and B common stock and Class C capital stock	\$ 28.32	\$ 18.27	\$ 44.22
Diluted net income per share of Class A and B common stock and Class C capital stock	\$ 27.85	\$ 18.00	\$ 43.70



CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions; unaudited)

	Six Months Ended June 30,	
	2018	2019
Operating activities		
Net income	\$ 12,596	\$ 16,604
Adjustments:		
Depreciation and impairment of property and equipment	3,653	5,042
Amortization and impairment of intangible assets	447	406
Stock-based compensation expense	4,870	5,525
Deferred income taxes	(157)	620
Gain on debt and equity securities, net	(4,060)	(3,878)
Other	(120)	(48)
Changes in assets and liabilities, net of effects of acquisitions:		
Accounts receivable	1,388	26
Income taxes, net	(656)	25
Other assets	(756)	(176)
Accounts payable	(23)	(443)
Accrued expenses and other liabilities	4,600	1,074
Accrued revenue share	(303)	(60)
Deferred revenue	295	(90)
Net cash provided by operating activities	21,774	24,627

Cash Flows: 10-Q (Investing and Financing)



Investing activities		
Purchases of property and equipment	(12,776)	(10,764)
Purchases of marketable securities	(23,041)	(44,724)
Maturities and sales of marketable securities	25,523	40,692
Purchases of non-marketable investments	(732)	(1,095)
Maturities and sales of non-marketable investments	1,191	206
Acquisitions, net of cash acquired, and purchases of intangible assets	(1,434)	(247)
Other investing activities	49	89
Net cash used in investing activities	<u>(11,220)</u>	<u>(15,843)</u>
Financing activities		
Net payments related to stock-based award activities	(2,699)	(2,435)
Repurchases of capital stock	(4,225)	(6,602)
Proceeds from issuance of debt, net of costs	6,236	317
Repayments of debt	(6,267)	(393)
Proceeds from sale of subsidiary shares	0	184
Net cash used in financing activities	<u>(6,955)</u>	<u>(8,929)</u>
Effect of exchange rate changes on cash and cash equivalents	(166)	31
Net increase (decrease) in cash and cash equivalents	3,433	(114)
Cash and cash equivalents at beginning of period	10,715	16,701
Cash and cash equivalents at end of period	\$ 14,148	\$ 16,587

Cash Flows: 10-K (Operating)



	Year Ended December 31,		
	2016	2017	2018
Operating activities			
Net income	\$ 19,478	\$ 12,662	\$ 30,736
Adjustments:			
Depreciation and impairment of property and equipment	5,267	6,103	8,164
Amortization and impairment of intangible assets	877	812	871
Stock-based compensation expense	6,703	7,679	9,353
Deferred income taxes	(38)	258	778
(Gain) loss on debt and equity securities, net	73	37	(6,650)
Other	376	294	(189)
Changes in assets and liabilities, net of effects of acquisitions:			
Accounts receivable	(2,578)	(3,768)	(2,169)
Income taxes, net	3,125	8,211	(2,251)
Other assets	312	(2,164)	(1,207)
Accounts payable	110	731	1,067
Accrued expenses and other liabilities	1,515	4,891	8,614
Accrued revenue share	593	955	483
Deferred revenue	223	390	371
Net cash provided by operating activities	36,036	37,091	47,971
• • •			

Cash Flows: 10-K (Financing & Investing)



Investing activities			
Purchases of property and equipment	(10,212)	(13,184)	(25,139)
Proceeds from disposals of property and equipment	240	99	98
Purchases of marketable securities	(84,509)	(92,195)	(50,158)
Maturities and sales of marketable securities	66,895	73,959	48,507
Purchases of non-marketable investments	(1,109)	(1,745)	(2,073)
Maturities and sales of non-marketable investments	494	533	1,752
Cash collateral related to securities lending	(2,428)	0	0
Investments in reverse repurchase agreements	450	0	0
Acquisitions, net of cash acquired, and purchases of intangible assets	(986)	(287)	(1,491)
Proceeds from collection of notes receivable	0	1,419	0
Net cash used in investing activities	(31,165)	(31,401)	(28,504)
Financing activities			
Net payments related to stock-based award activities	(3,304)	(4,166)	(4,993)
Repurchases of capital stock	(3,693)	(4,846)	(9,075)
Proceeds from issuance of debt, net of costs	8,729	4,291	6,766
Repayments of debt	(10,064)	(4,377)	(6,827)
Proceeds from sale of subsidiary shares	0	800	950
Net cash used in financing activities	(8,332)	(8,298)	(13,179)

Valuation Measures



FUNDAMENTALS

Market Capitalization, \$M	876,662 M	Price/Earnings (TTM)	24.24
Shares Outstanding, M	693 M	Price/Earnings (Forward)	28.32
36-Month Beta	0.99	Trailing Annual Dividend & Yield	0.00 (0.00%)
Earnings Per Share (TTM)	51.94	Forward Annual Dividend & Yield	0.00 (0.00%)
Revenue Growth YoY	23.42%	Most Recent Dividend	N/A
Profit Margin	22.46%	Ex-Div Date	N/A
5-Year Avg. Revenue Growth	17.99%	Most Recent Split	2-1 (04/03/14)
5-Year Avg. Profit Growth	20.27%	Return on Common Equity	20.15%
1-Year Total Return	18.94%	Return-on-Assets (Before Tax)	14.33%
3-Year Total Return	65.02%	Debt-to-Equity Ratio	0.07
5-Year Total Return	133.59%	Price/Book	4.55

Alphabet Inc. A (GOOGL)

Valuation Measures



FUNDAMENTALS

Market Capitalization, \$M	877,237 M	Price/Earnings (TTM)	24.28
Shares Outstanding, M	693 M	Price/Earnings (Forward)	22.54
36-Month Beta	0.99	Trailing Annual Dividend & Yield	0.00 (0.00%)
Earnings Per Share (TTM)	51.94	Forward Annual Dividend & Yield	0.00 (0.00%)
Revenue Growth YoY	23.42%	Most Recent Dividend	1.520
Profit Margin	22.46%	Ex-Div Date	N/A
5-Year Avg. Revenue Growth	17.99%	Most Recent Split	N/A (N/A)
5-Year Avg. Profit Growth	20.27%	Return on Common Equity	20.15%
1-Year Total Return	20.40%	Return-on-Assets (Before Tax)	14.33%
3-Year Total Return	69.29%	Debt-to-Equity Ratio	0.07
5-Year Total Return	138.44%	Price/Book	4.55

Alphabet Inc. C (GOOG)

Stock Price Forecast

The 41 analysts offering 12-month price forecasts for Alphabet Inc have a median target of 1,400.00, with a high estimate of 1,712.76 and a low estimate of 1,245.00. The median estimate represents a **+8.53%** increase from the last price of 1,290.00.





BUY