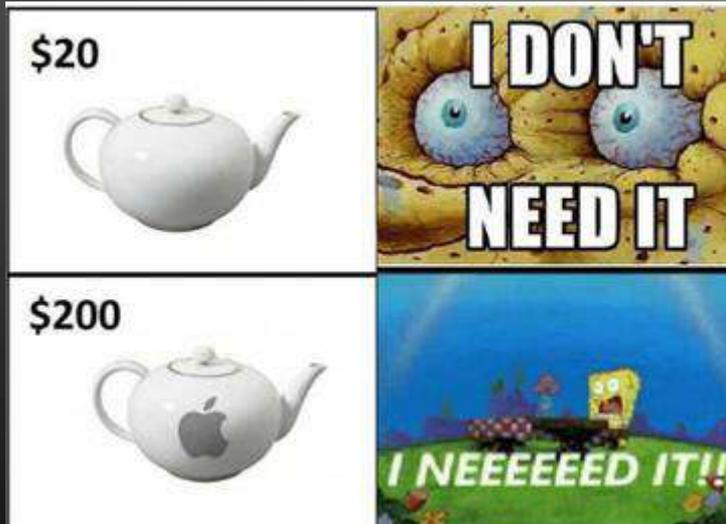
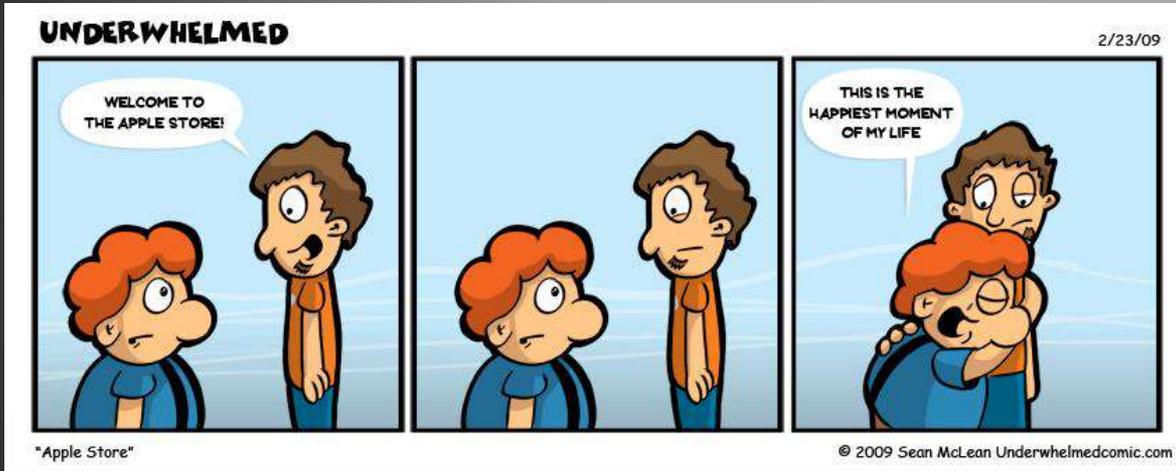


Firms and innovation: The Apple case



Brief company history

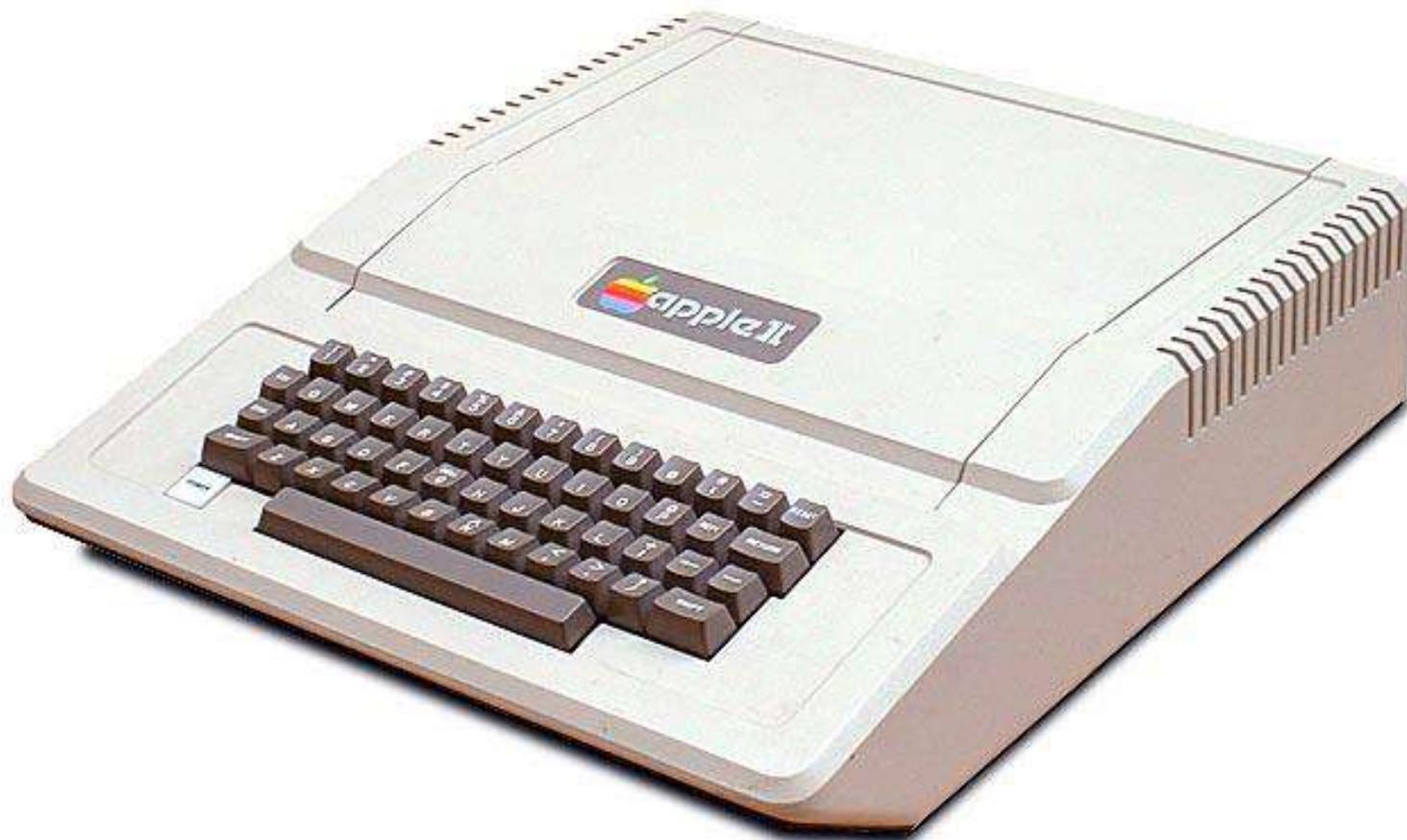
- 1976: Steve Jobs, Steve Wozniack and Ronald Wayne founded Apple in a garage in Santa Clara, with the aim of producing an easy-to-use computer for single consumers
- 1976: [Apple I](#) is launched, with scarce success
- 1976: Wayne leaves the company, fearing a failure, selling his share (10%) for 800\$
- 1977: the company becomes Apple Computer Inc., thanks to a funding from Mike Makkula
- 1977: [Apple II](#) is launched on the market, good sales
- 1980: Apple sales reach 117 mln. \$
- 1983: [Lisa](#) is launched, the first computer with a monitor. Scarce success due to high price (9995\$ dell'epoca). Jobs employs John Sculley as new CEO, former president of Pepsi
- 1984: Apple experiences a period of high sales with the launch of [Macintosh](#). Wozniack leaves the company.
- 1985: After losing a boardroom struggle with Sculley, Jobs resigns from Apple. Microsoft becomes the main competitor
- 1985: With a loyal band of former Apple employees, Jobs starts NeXT, informatic firm for professional figures
- 1986: Jobs acquires Pixar
- 1997: Apple [quarterly loss](#) of 530 m.\$
- 1998: Apple acquires NeXt and Jobs comes back as President. It restructures Apple by betting only on two product lines : 1) "i"Mac ("i" = internet); 2) Professional "Power"Mac ("power" ="power user"). All other products are dismissed, with a reduction in the number of departments. Wosniack also comes back and an agreement is signed with Microsoft to develop Mac-compatible versions of Office and Explorer. Sales increase, the brand is strengthened, focus on innovation (USB, Firewire, Airport, iPod and iTunes), and increase in share value.
- 2011: Steve Jobs dies and Tim Cook becomes the new CEO.



Apple I



Apple II



Lisa



Macintosh



WIRED

1997

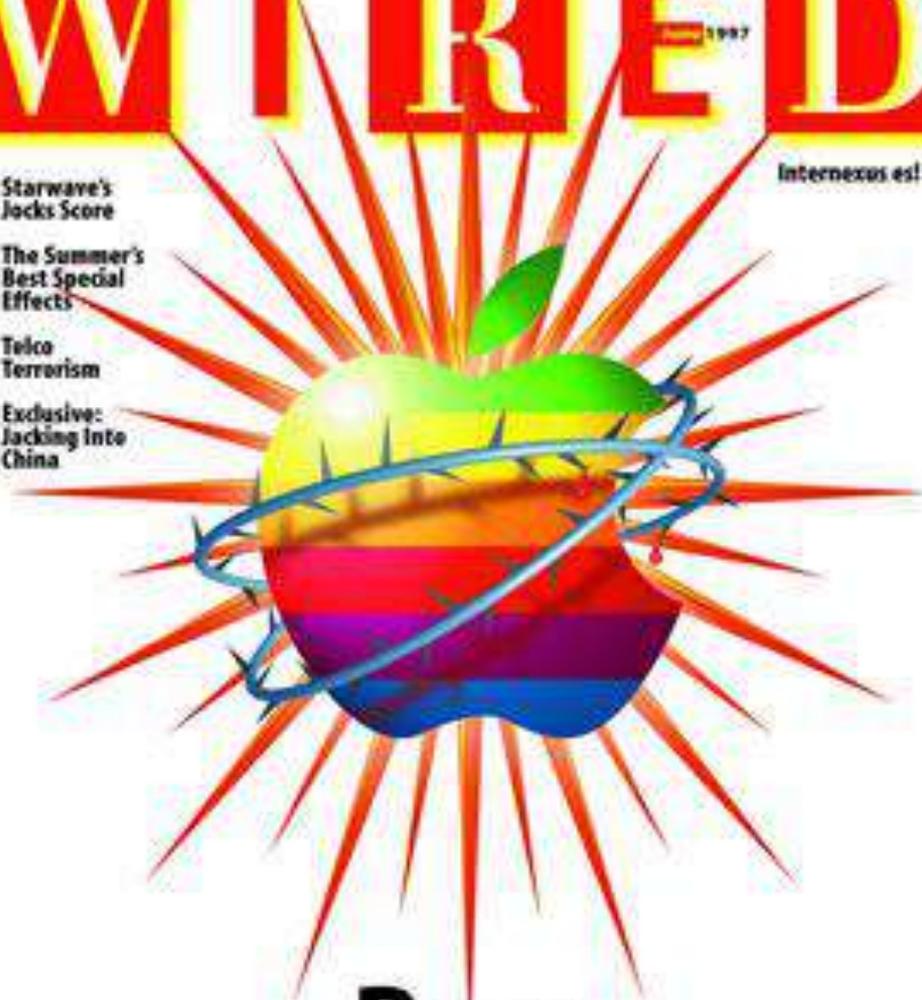
Starware's
Jocks Score

The Summer's
Best Special
Effects

Telco
Terrorism

Exclusive:
Jacking Into
China

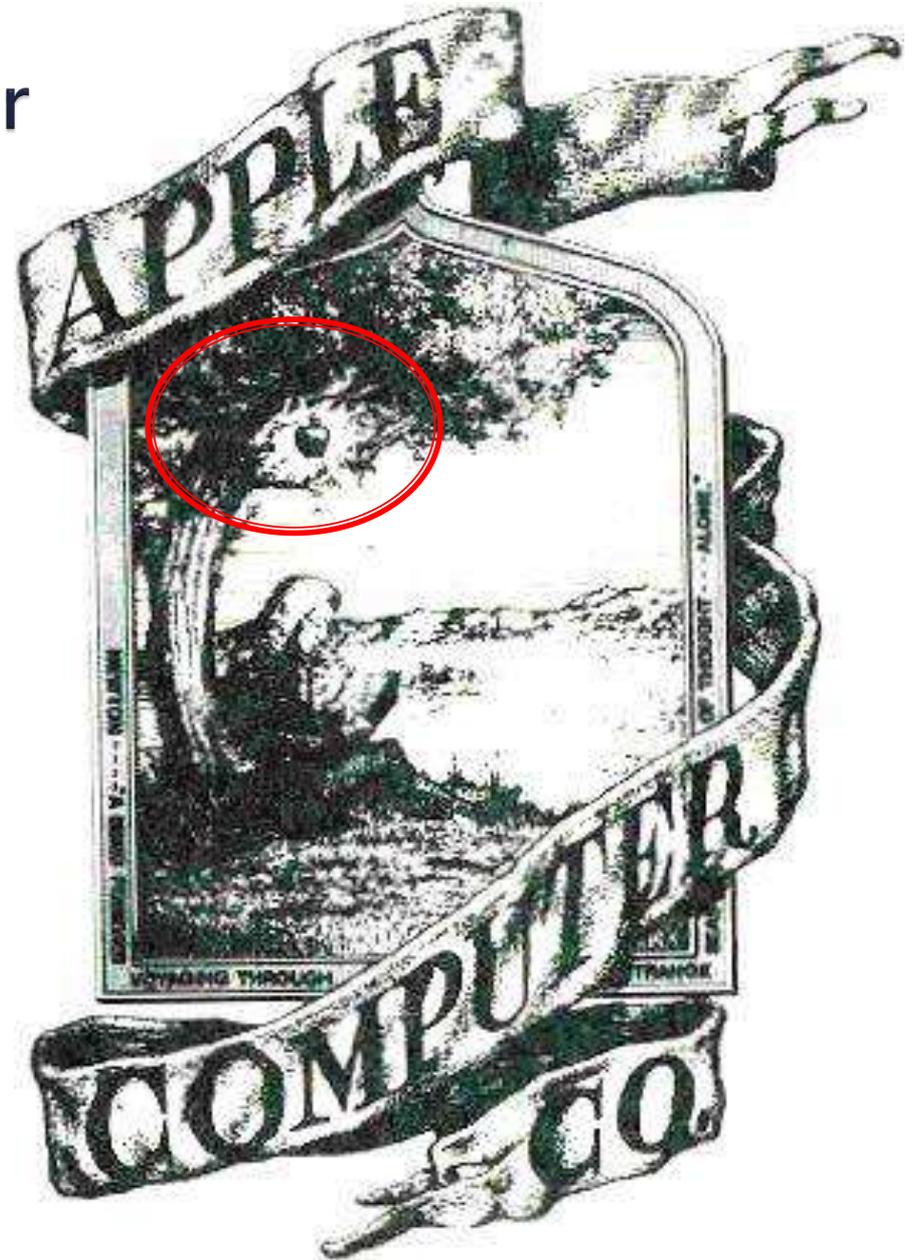
Internexus es!



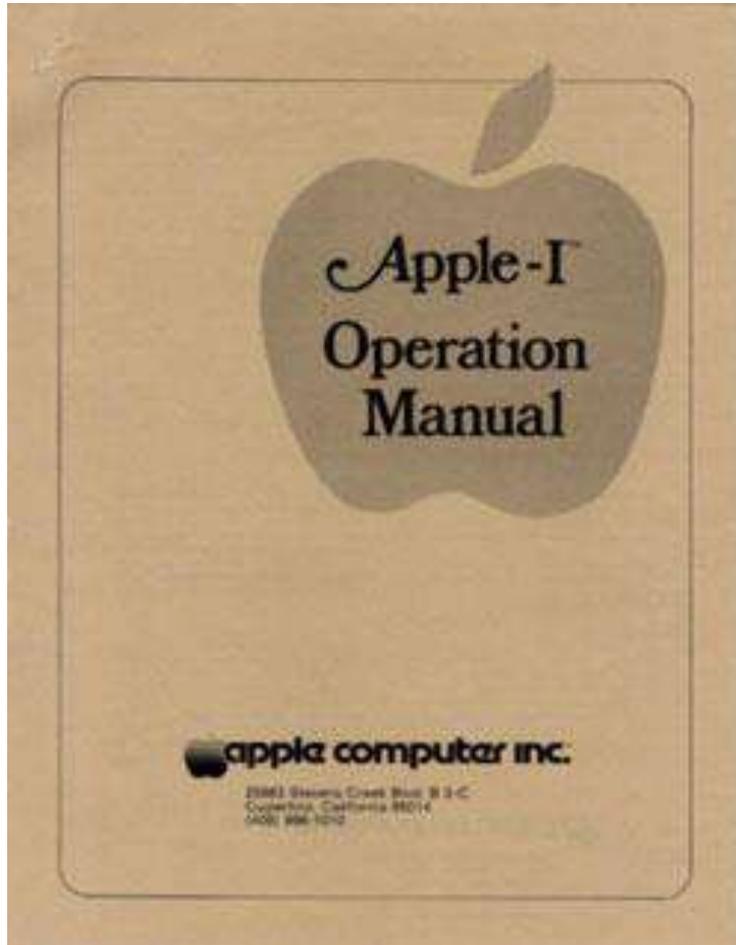
Pray.



Apple: The brand power



Apple: the brand power (cont.)



Apple

Apple Corps.
Ltd

The fight between Apple Corps and Apple Inc.

- **1978:** Apple Records (Corps) sues Apple Computer (now Apple Inc.) for trademark violation. In 1981 Apple Records wins the dispute, with a payment of 80.000\$. As adding clause, Apple Computer accepts to stay out from the music industry.
- **1989:** Apple Corps sues again Apple Inc. for violation of the 1981 agreement due to the capability of Apple computer of music playback and creation. A new agreement is reached with the payment by Apple Inc. of \$26.5 million, plus legal expenses.
- **2003:** Apple Corps sues again Apple Inc. for the launching of iTunes Music Store and iPod, in violation of the 1981 agreement. The case went to court in 2006 and was won by Apple Inc. (the company was not marketing music, but merely delivering it to customers through its network). Apple Corps was required to pay about £2 million in legal fees.
- **2007:** Apple Inc. and Apple Corps reach a final agreement: la Apple Inc. pays \$26.8 million for the right to use the Apple name in computers and music distribution and it becomes the owner of all logos linked to “Apple” (including the original green apple), and licences the green logo to Apple Corps. This ended all disputes (each one paying its own legal fees).

Apple: the brand power(cont.)



1976



1976-1988



1998-2001



2001-2007



2007-2013



2014-NOW

Apple: brand fidelity



The company image

Steve Jobs chooses to strengthen the idea of a young, informal, casual company.



To innovate: the iPod

The iPod was not the first Mp3 player, but none of the existing ones was a hit (too costly, limited memory and difficulties in finding the music).

Apple signed an agreement with PortalPlayer, a small company realising Mp3 players for its own clients. In 2001 PortalPlayer granted the supply of circuits and internal software. This agreement has been kept secret until 2002, allowing a rapid product development.

Despite the multiplication of Mp3 players, the iPod reached a totally unexpected success.

RIP iPod

400m units sold, \$65bn+ revenue

iPod performance since launch



Source: Apple, a16z



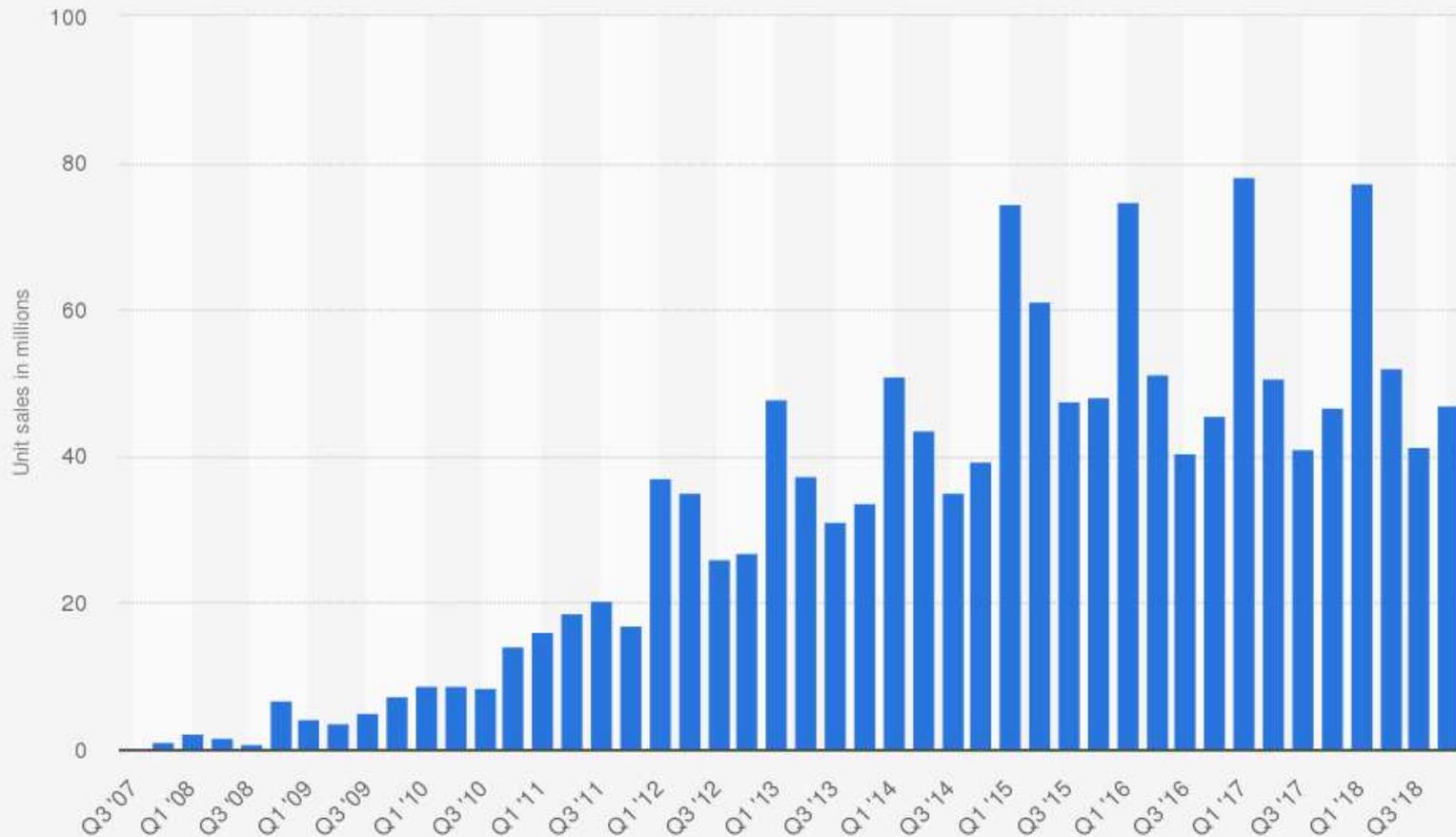
evolution of the iPod
kproductions.deviantart.com

Diversification: the iPhone



Diversification: the iPhone

Global Apple iPhone sales from 3rd quarter 2007 to 4th quarter 2018 (in million units)*



Source
Apple
© Statista 2019

Additional Information:
Worldwide; Apple; 2007 to 2018

iPhone Share of Apple Sales Drops to 7-Year Low

Apple's iPhone revenue as a percentage of total revenue since 2007*



© StatistaCharts

* Apple's fiscal year ends on the last Saturday of September

Source: Apple

statista

The defence against imitation (1): the legal system



- ▶ Multiple patents violation (over than 50 lawsuits around the world): for example management of calls, slide – to – unlock and synchronisation, design, shape, graphic details.
- ▶ Fight extended to tablets

iPHONE THROUGH THE YEARS

From the very first iPhone to the latest one

The defence against imitation (2): continuous innovation

WEIGHT (in gm)

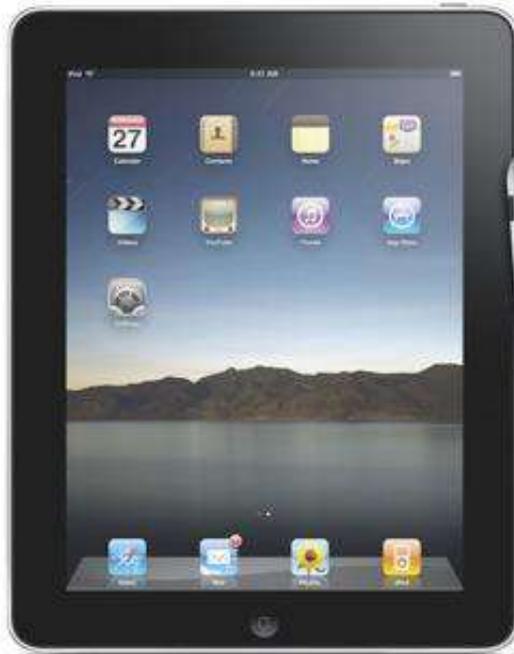


Innovating: the iPad

iPad
with Retina display



iPad mini





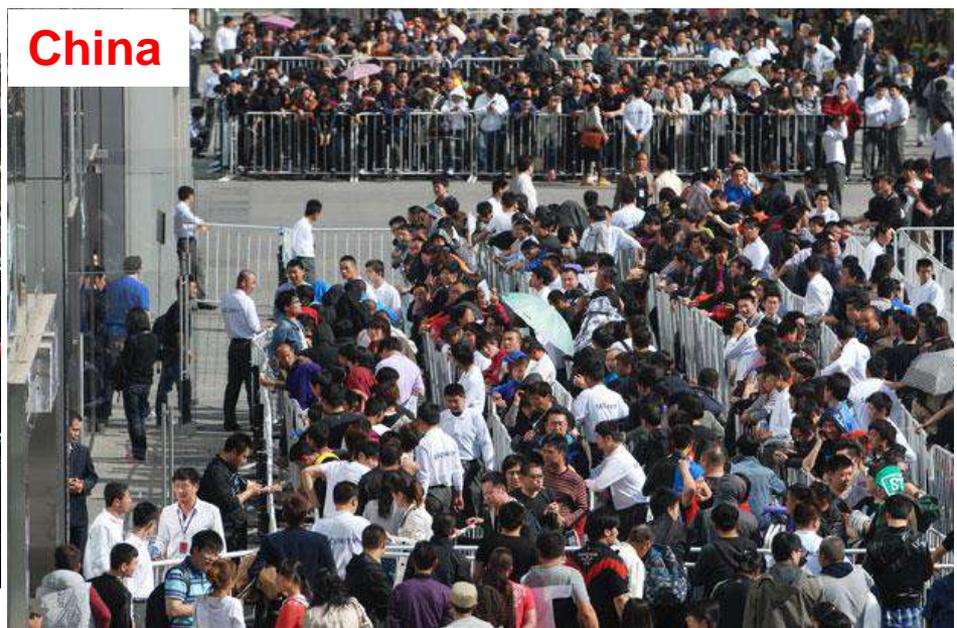
NY



Firenze

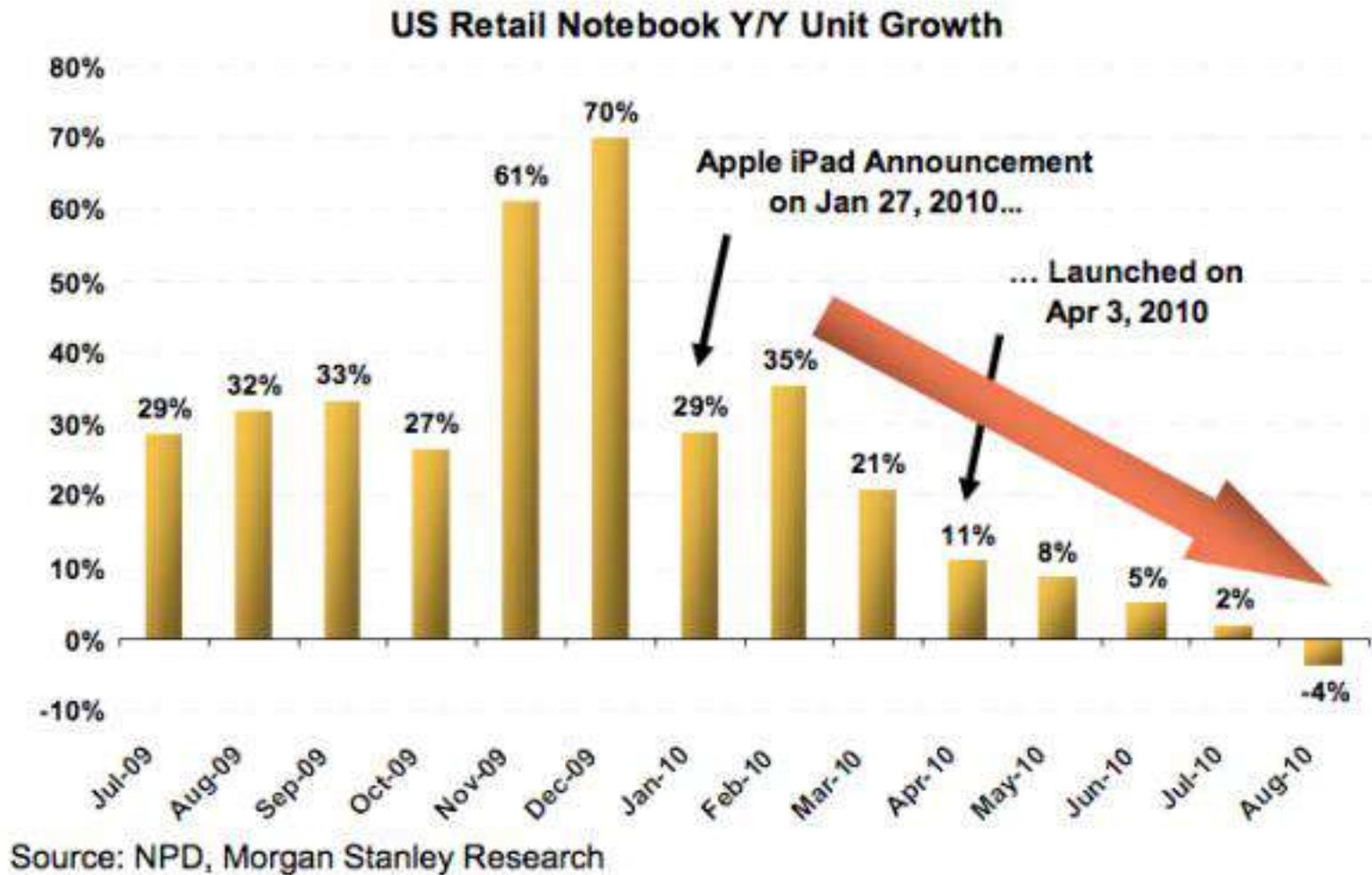


London

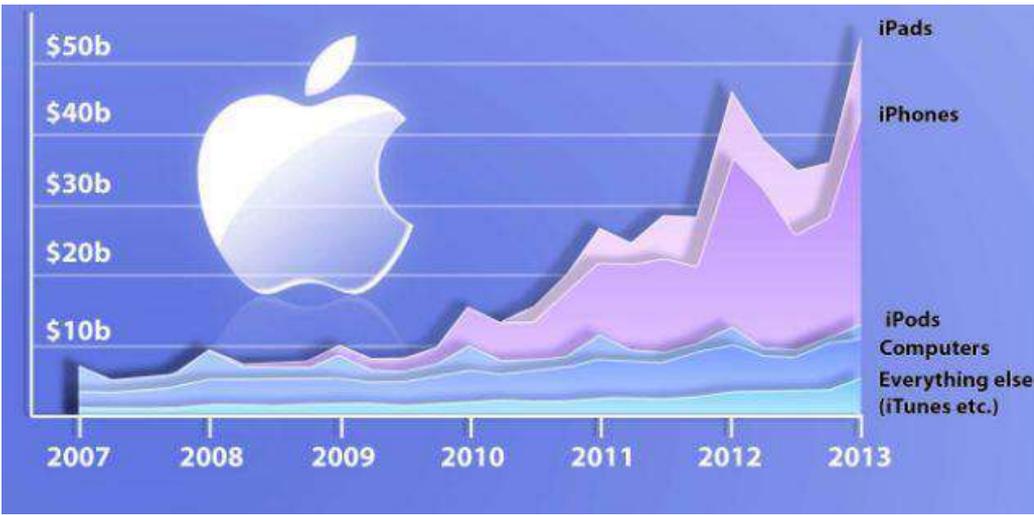


China

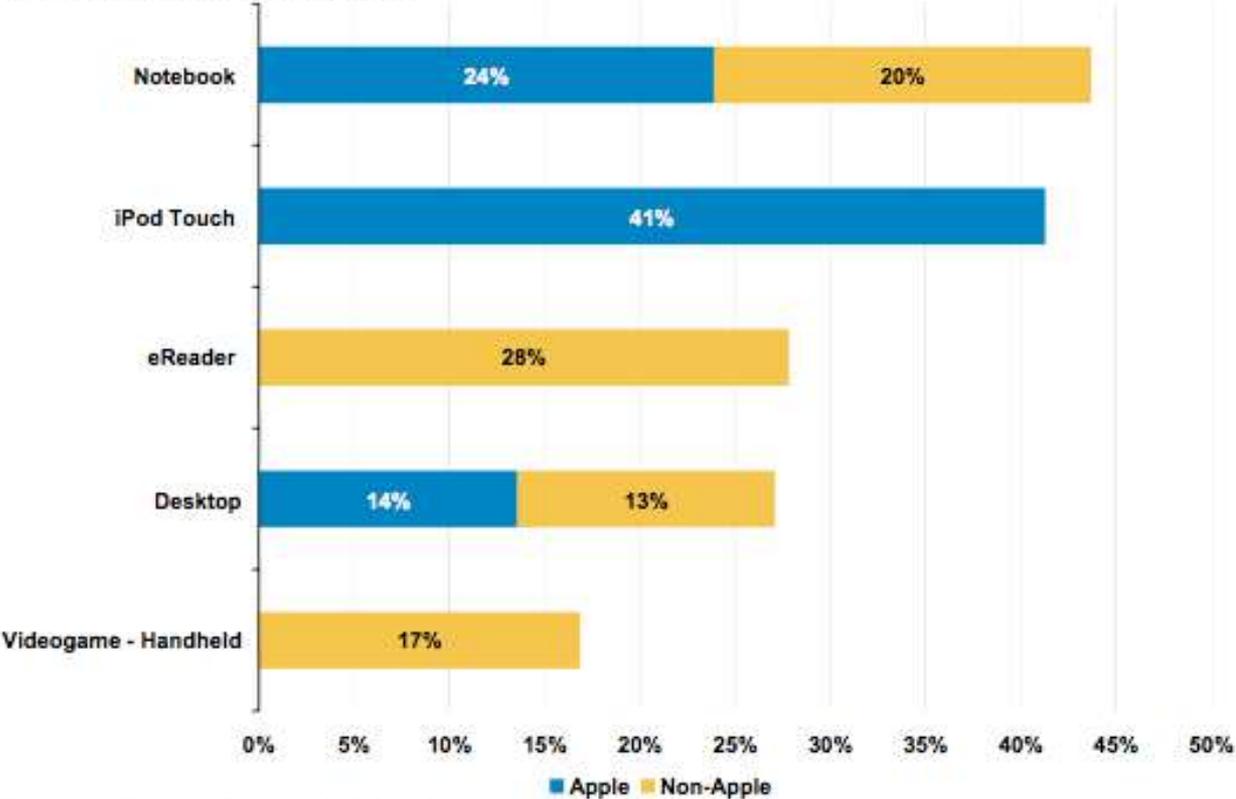
The iPad effect on the laptop market



«Cannibalisation» risk



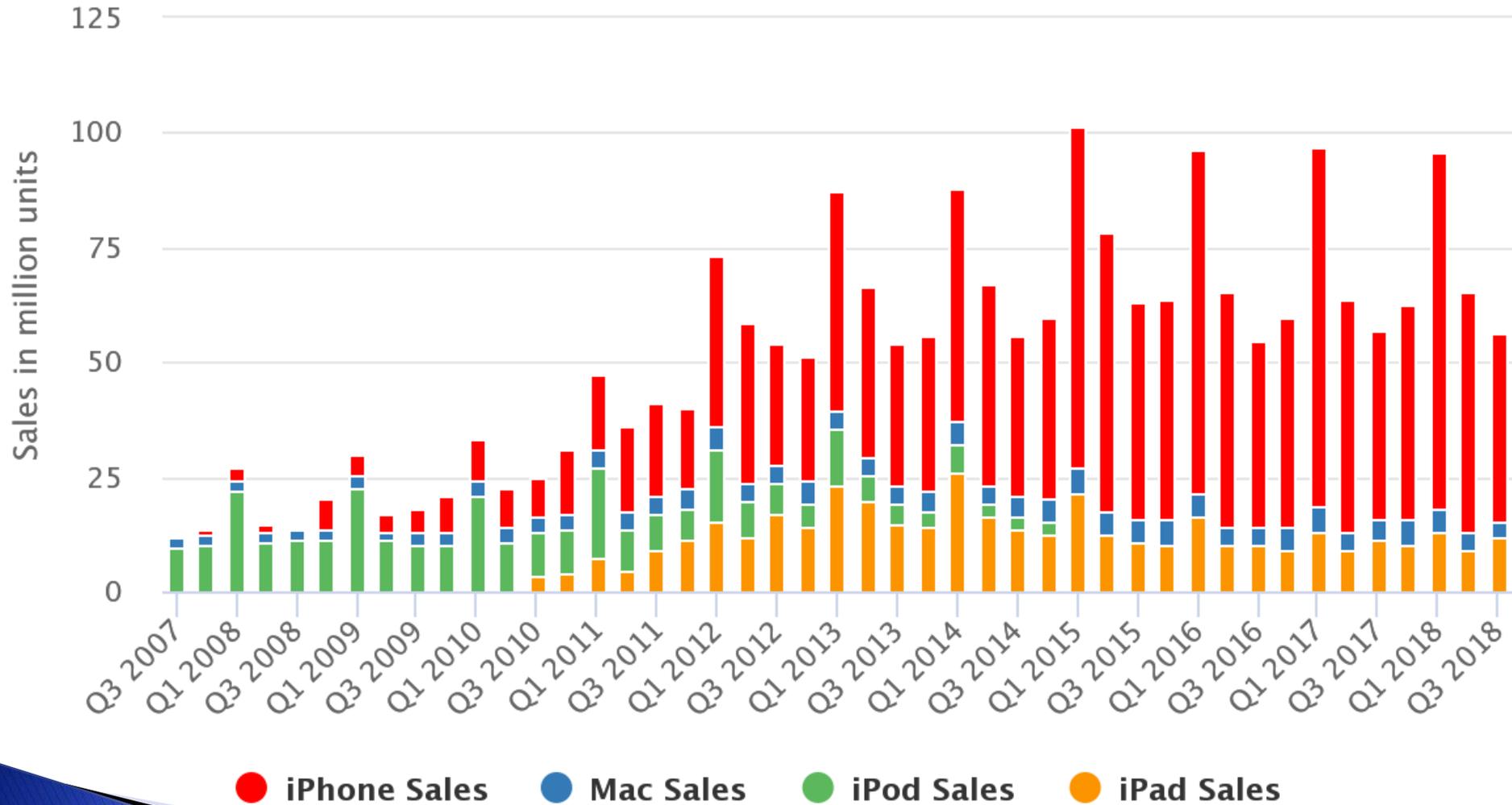
iPad Cannibalization by Product Type



Source: Morgan Stanley Alphawise

Apple Products Sales Worldwide

(In fiscal quarters)



A no-failure history?



Power Mac G4 Cube

Launch: Jan 2000

Price: 1800\$ in 2000

Withdrawal: July 2001

Causes of failure:

- Very high price: almost the same as a PowerMac but not equally expandable due to reduced dimensions;
- Excessive focus on design decrease robustness: customers complained for the fragility of the case, showing cracks shortly after purchase;
- «self-cannibalisation»: the Cube stands between iBook and PowerMac, but given the reduced functions, customers prefer to spend \$ 200 more and to buy a PowerMac.

Apple firstly tries to increase sales by adding software, reducing the price and updating the device, without however being able to convince the market.

A no-failure history?



Newton Message Pad

Launch: 1993

Price: 799–999 \$ in 1993

Withdrawal: 1998

It is the first palm: Apple creates a market *ex novo*. Price is high but not excessive, given that customers are managers.

Causes of failure:

- Apple announces the launch too early, forcing developers to accelerate the launch without having completed the development phase;
- Some functions are slow and the device is pretty large;
- The software is design to recognise whole words instead of single letters;
- Data synchronisation is hard. Apple chooses not to diffuse to third parties the technical details, for this reason there are not external developers able to solve the problem.

8 improved models are developed, but none of them is able to increase sales (many of them cause losses).

Apple tries to sell the project to 3Com that, with the Palm division, was trying to realise a product similar to Newton, but it refused.

After more than \$500 million spent in research, Apple decides to cancel the Newton project (despite the product having features similar to some models currently on the market).

A no-failure history?

Apple Puck Mouse

Launch: 1998

Withdrawal: 2000



It is the first mouse using the USB port for connecting to the pc. It is launch together with the new line of coloured iMac, in order to have a coordinated mouse.

The product is almost unusable: the rounded shape does not fit the hand shape, and it is difficult to find the button without looking for it.

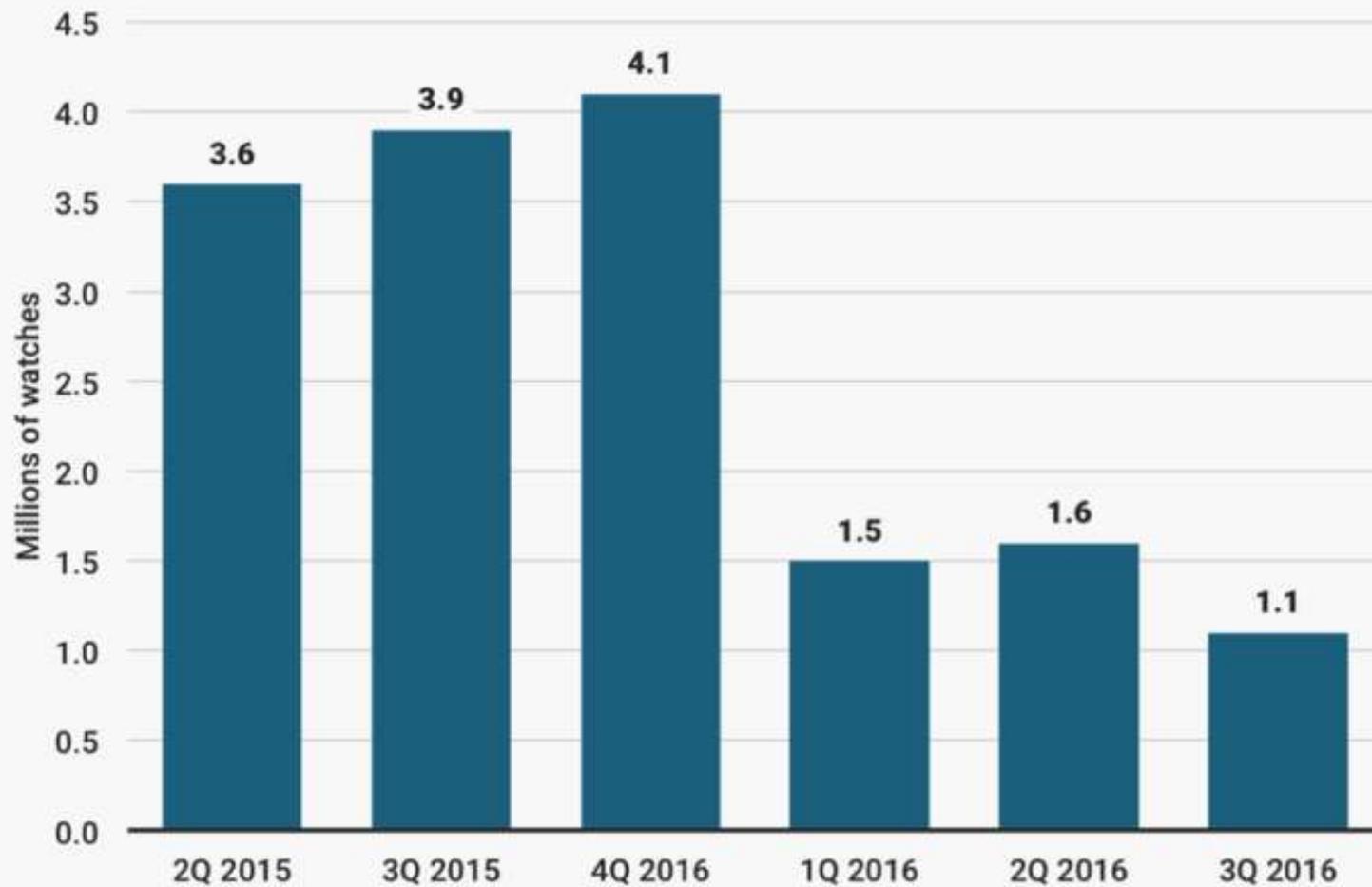
Some solutions have been tries, such as an adapter to facilitate the use, but after two years it is replaced with a new model with a more ergonomic design.



A missed blockbuster?



APPLE WATCH SALES



SOURCE: IDC

BUSINESS INSIDER

Despite Reports, Apple Watch Users Extremely Satisfied



iPad (2010)
ChangeWave Research

91%



iPhone (2007)
ChangeWave Research

92%



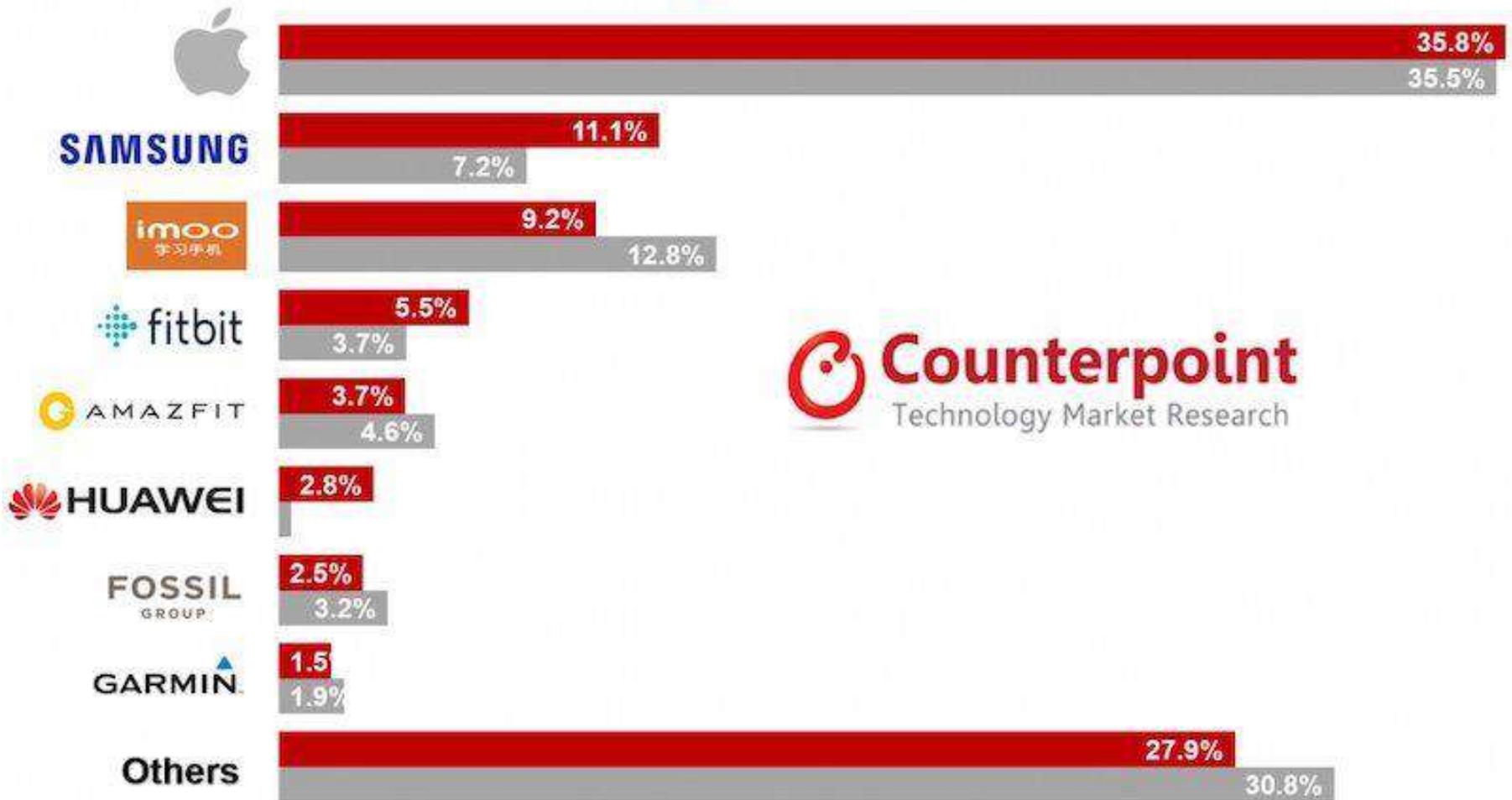
Apple Watch (2015)
Wristly Research

97%



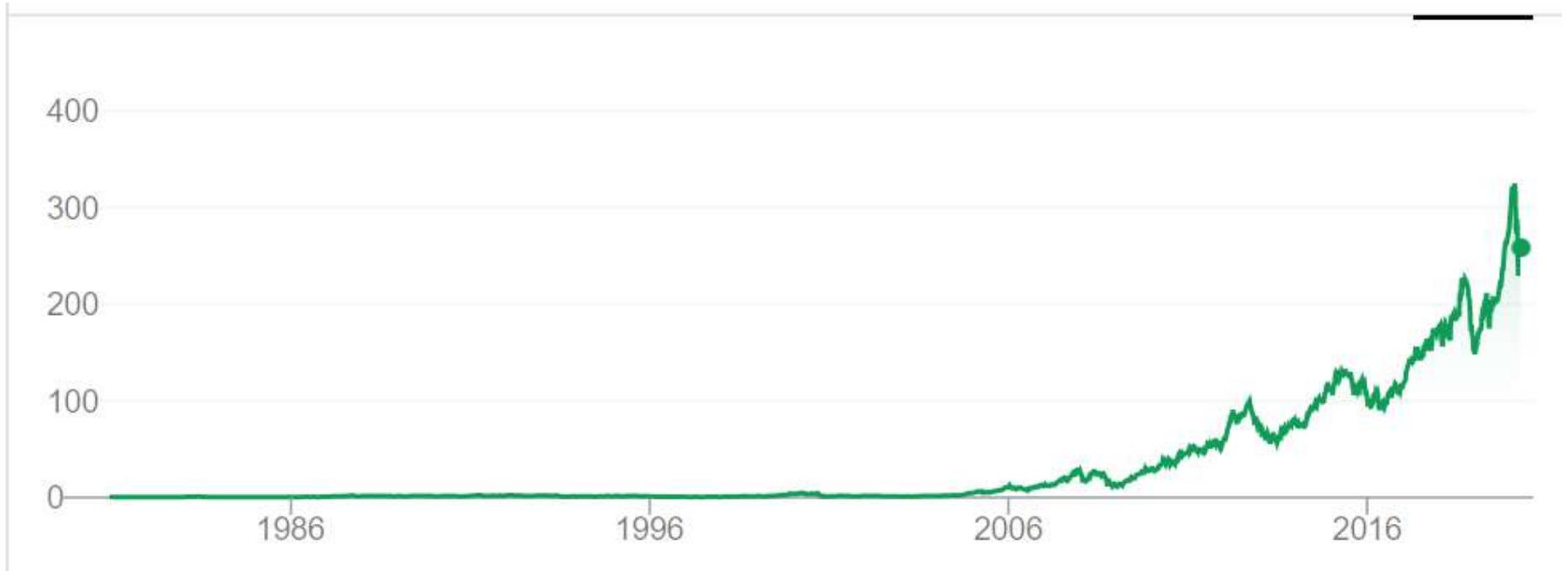
■ Q1 2019

■ Q1 2018



 **Counterpoint**
Technology Market Research

Stock exchange trend (since the beginning)



Value of one share in 1980: \$ 0.51
Value of one share in 2020: \$ 259.43
Variation 1980–2020: + 50,768.63%
(800\$ in shares in 1980 today are valued more than 500.000\$)
10% of Apple ownership today would be much more...

Stock exchange trend (last year)

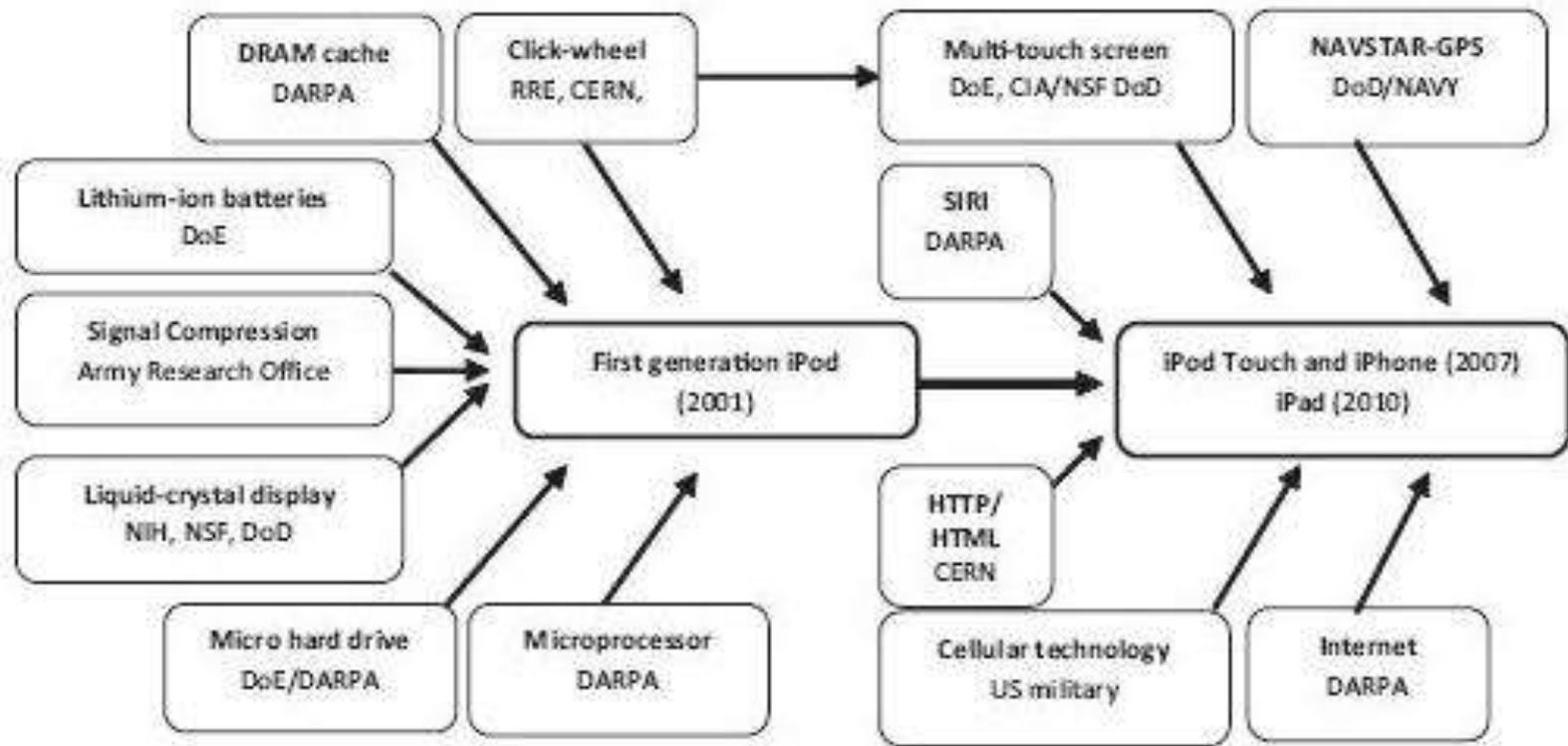


A success without policy measures?

Apple's success has to be interpreted along with a wide network of industrial policy measures.

In particular, the company has received:

- 1) Direct state equity investment in the first stages of creation and growth;
- 2) Full access to technologies developed by public institutions (microchips, DRAM, hard disks, LCD displays, lithium batteries, digital signalling, internet, HTTP and HTML, mobile technologies and networks, GPS, multi touch screen, voice-user interface);
- 3) Fiscal, commercial and technological policies to support large American corporations;
- 4) Public procurement.



Source: Mazzucato, M., *The Entrepreneurial State*, Anthem, 2013.

What does the state get in turn?

▶ Employment

- There is a wide gap between the top management wage and the workers' wage (workers in many cases localised in China): in 2011, the first 9 top managers have earned an amount of money equal to the wages of 95,000 Chinese (Foxconn) workers or 15,000 American workers

▶ Multinational company

- A great part of the value is created outside the U.S. (about 50 of an i-phone)
- Subsidiaries are located, both in the US and abroad, in order to decrease the amount of taxes

Why is the European Union going [after Apple for \\$14 billion](#) in unpaid taxes?

Consider this: In 2014, the corporate giant paid just \$50 in tax for every million it made selling iPhones and iPads to most of the world outside America.

That's a tax rate of just 0.005%. Yes, you read that correctly.

So how was that allowed to happen?

Apple has funneled most of its profits from Europe, the Middle East, Africa and India through Ireland for decades. Nothing unusual in that. [Others do it too.](#)

But under deals the company struck with the Irish government as far back as 1991, it was allowed to split these profits between its Ireland branch and an Apple head office that existed only on paper.

Apple paid the standard Irish tax rate on profits booked to its Ireland branch. Those it allocated to the phantom head office were tax free, because under Irish law it was then considered a "stateless company."

How Does Apple Avoid Taxes?



Lee Sheppard, CONTRIBUTOR

I write about tax and financial issues. [FULL BIO](#) ▾

Opinions expressed by Forbes Contributors are their own.

Apple's brand halo is slipping. Silicon Valley's well-known vanity and contempt for government are amply displayed in Apple's tax figures. Apple, a consumer products company that sells beautifully designed gadgets, pays very little tax anywhere in the world, including the United States.



[Apple](#) AAPL -0.89% is playing fast and loose with consumers' affection for its highly discretionary products, especially in Europe. It is ill-advised for any consumer products company not to pay tax where it sells products. Equally important, Apple's tax avoidance is also testing the patience of strapped European governments that are looking for ways to get American multinationals to pay tax.



OR

