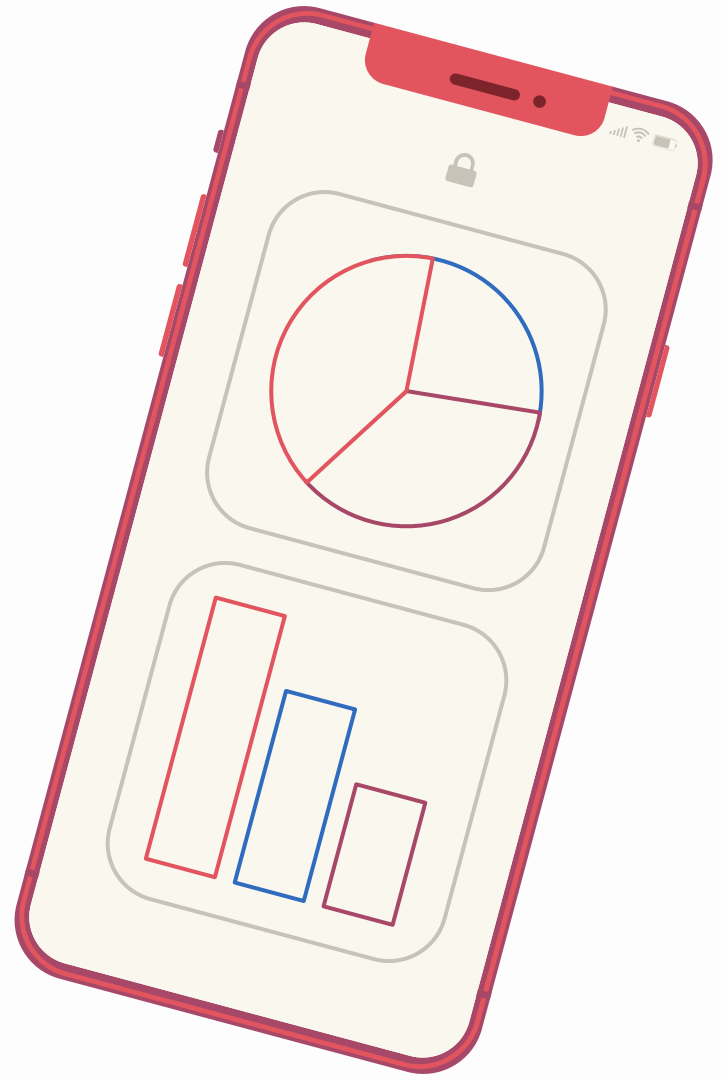


Planned Obsolescence of Smartphones

Eduardo Leite and Benson Leung

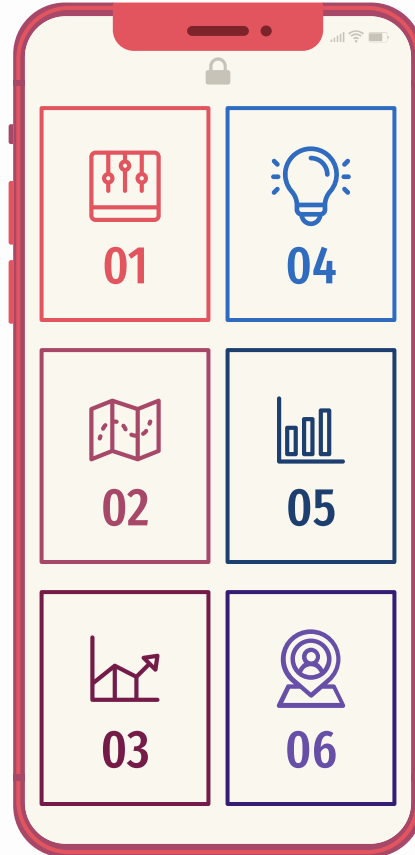


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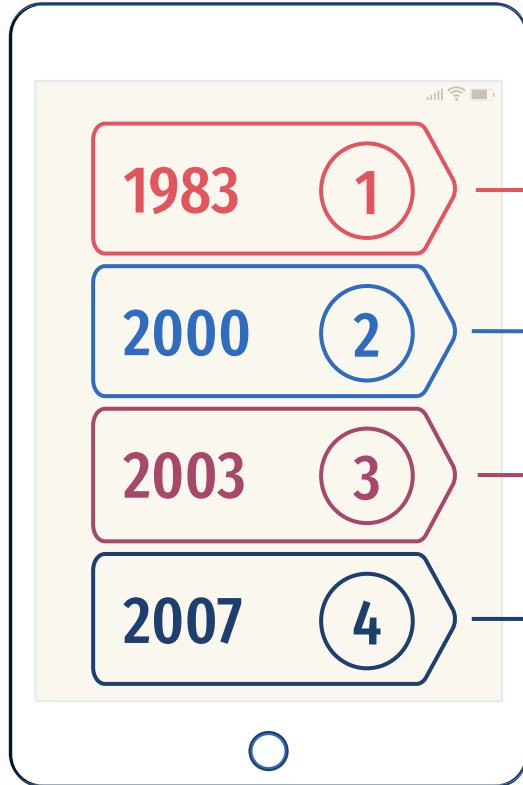
"Planned obsolescence describes a strategy of deliberately ensuring that the current version of a given product will become out of date or useless within a known time period."

https://www.investopedia.com/terms/p/planned_obsolescence.asp

- Smartphone manufacturers are planning for their phones to have short life spans, usually 2-3 years, so that they may sell more phones
- They do this several ways, such as: making repairs difficult/impossible, preventing software updates, introducing new models yearly, etc.



History



Motorola DynaTAC 8000X

Nokia 6610

Palm Treo 600

iPhone

Falls to the floor



Break the screen

Falls to the floor



Break the floor

First commercial cell phone released. At that time it cost \$3,995.

One of the best selling phones of all time. It cost about \$160 when released. It is also known as the indestructible phone.

One of the earliest smartphones created. It was able to take pictures and send emails.

First iPhone created. It is responsible for jumpstarting the whole smartphone industry as we know it today.



Overview

New Yearly Models

Smartphone companies release a new flagship model yearly. Through the power of their marketing, people crave the newest thing and see it as a must have. This makes older models “obsolete”, even though they are in perfect working condition.

Software Update Supports

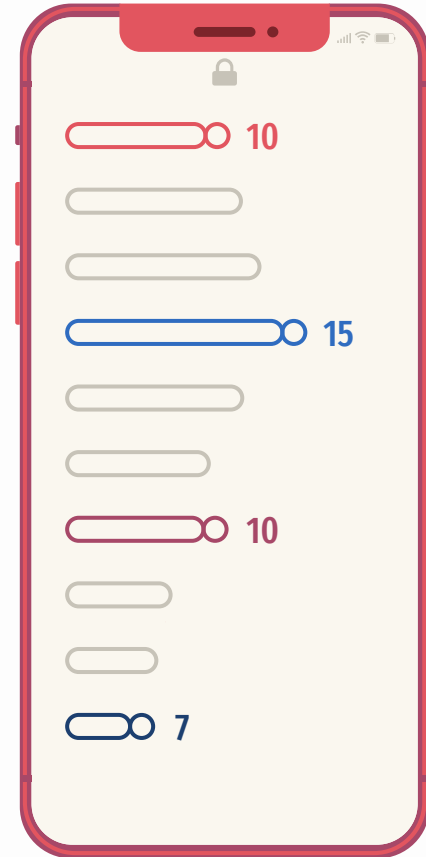
In the Android ecosystem, phones primarily use one processor manufacturer, Qualcomm Snapdragon. This company only supports their product for an average of 3 years, which means that your phone can't be updated to the newest version of Android after 3 years. Smartphone companies compound onto this issue by releasing their newest flagships with the latest version, while the older models will have to wait at least a couple of months to receive the update if they are receiving it at all. Apple has been by far the best at supporting the software in their older models. The iPhone 6, released in 2015, will get software update support until next year.

Impossible/Difficult Repairs

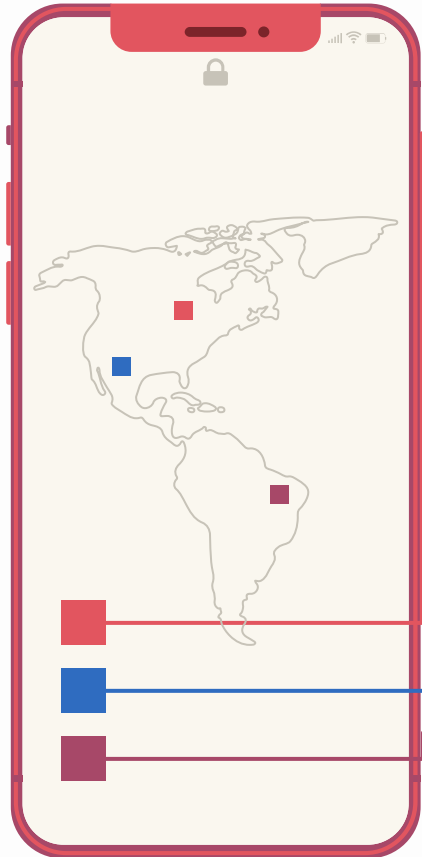
“Gay Gordon-Byrne, executive director of The Repair Association, wants to make it easier for iPhone owners, farmers and other consumers to get their products fixed.” President Biden is also on board and has recently urged the Federal Trade Commission to write regulation to force manufacturers to make repairing your devices easier.

Slowing Down Phones

In 2017 iPhone users were appalled to find out that their devices would malfunction when the batteries were weak. However, Apple made it impossible for batteries to be replaced.



Rise of Smartphones



E-Waste

Most phones today are not easily user-serviceable. This leads to 416,000 phones being disposed of daily.

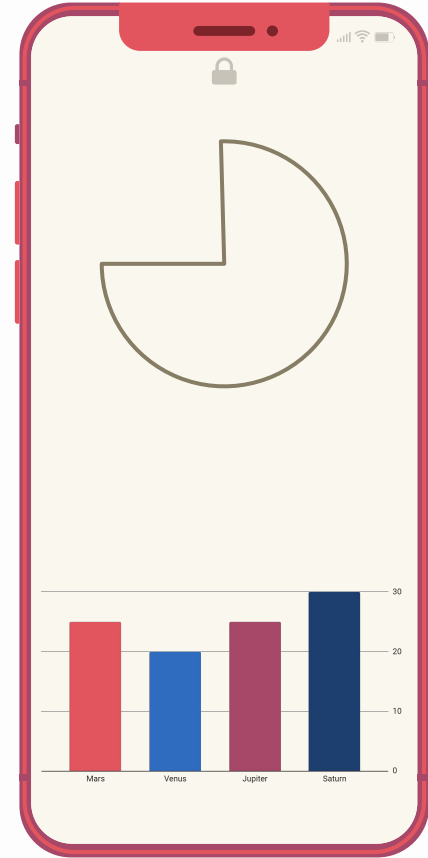
Rich Get Richer

Apple's market value was \$174 B in 2007 when the first iPhone was released. Today it is now worth \$2.4 T or about 1400% increase.

Equity

The average US household salary today is about \$52,000. The price of a flagship model from Samsung or Apple is about \$1000. That equates to a week of income just to purchase a smartphone. This is just the US, now imagine how this affects third-world countries?

Some Possible Solutions



Right to Repair

- Smartphone companies should make phones easier to repair.
- There shouldn't be a need to use expensive or difficult-to-obtain equipment just to repair products that we paid for.
- Manufacturer parts should be easy to purchase and affordable for every consumer.
- Very recently, Apple started making parts, like display, camera, and battery, available to purchase for the iPhone 12 and 13.
 - This a step in the right direction.



Vote with Wallet



- Consumers can force smartphone companies to do better by not purchasing phones from companies that make it difficult to repair their products.
- For example, consumers can purchase phones from Fairphone, who sell parts directly to their consumer and includes an incredible 5 year warranty.

Modular Parts

- Instead of releasing a new phone every year with barely any differences, smartphone companies could just make each individual parts available to upgrade.
- For example, Apple could have made iPhone 12 camera available to install onto the iPhone 11.
- Companies, like LG and Motorola, have tried this before, but since they didn't have enough market share, they did not succeed.
- Google also tried to attempt this with Project Ara, but it was cancelled before it was ever released.

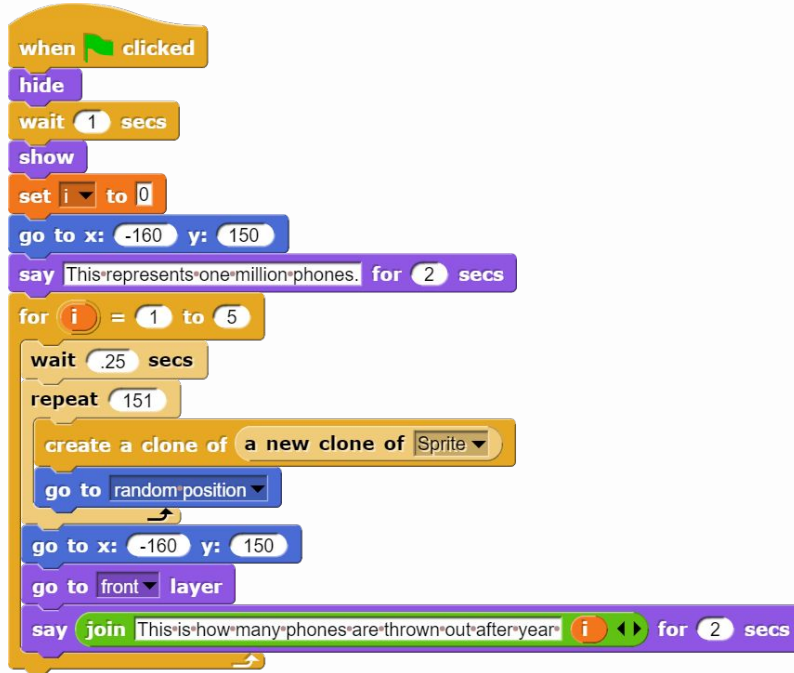


Custom Software

The logo for LINEAGE, featuring a stylized blue icon of a person with a circular head and the word "LINEAGE" in a teal, sans-serif font.The logo for Paranoid Android, with the word "paranoid" in a dark grey sans-serif font and "android" in a bright green sans-serif font.

- Consumers should be allowed to update all their phones regardless of how old they are.
 - No need to purchase a new phone just to receive the newest software features
- Security vulnerabilities are discovered multiple times a year
 - Every phone should be protected against these risks
- Custom software should be promoted, rather than shut down.
 - Just look at Linux

Code: *Phones Thrown Out Per Year*



<https://snap.berkeley.edu/snap/snap.html#present:Username=eleite&ProjectName=Ethics>



Sources

Apple. Apple Announces Self Service Repairs, Apple Press Release, November 17, 2021.

Chng, Roy. How long do chipmakers support their processors for Android updates? Valorvortech 2021.

Charmaine Crutchfield. Smartphone disposal poses security risks, experts warn. USA Today, Nov 10 2014.

Dancing, Juliet. Planned Obsolescence: Why Your Phone Becomes Obsolete Too Fast. cellular News, 9 May 2021.

Goodwin, Richard. How Long Does Apple Support iPhones? Complete Update List. KYM, 20/09/2021 12:19 pm.

Keach, Sean. World's top Apple expert reveals exact year when iPhone 'will become obsolete', New York Post, November 26, 2021.

Pachauri, Abhay. What You Can Repair Is What You Own, Legally India, 20 March 2020.

Proctor, Nathan. Americans Toss 151 Million Phones A Year. What If We Could Repair Them Instead? WBUR, dECEMBER 11 2018

Project Ara. Wikipedia, 22 August 2021, at 08:05 (UTC)

Purdy, Kevin. Apple's New Screen Repair Trap Could Change the Repair Industry Forever, IFIXIT November 4, 2021.

Simmons, Haddlee. How long do chipmakers support their processors for Android updates? Android Authority, July 6 2020.

Triggs, Robert. Fact check: Is smartphone battery capacity growing or staying the same? Android Authority, July 21 2018.

Nina Tröger, Harald Wieser and Renate Hübner. Smartphones are replaced more frequently than T-shirts. 2015

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10.15501/978-3-86336-914-9_5. Düsseldorf, 2017.