



Own Your Data

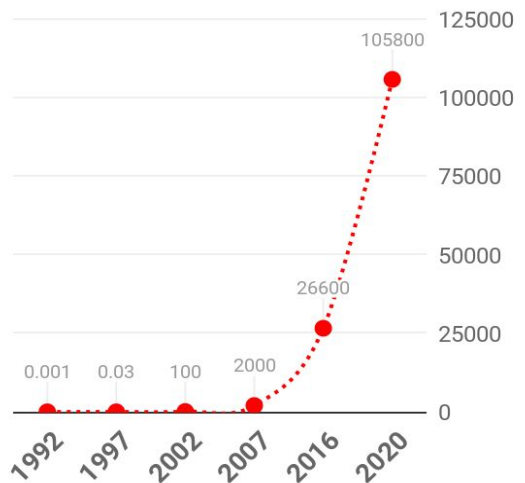
# Proliferation of Data

Large-scale collection of personal metadata is made possible by smartphones, web services, and increasingly, the Internet of Things

In 1992, 1 **MB** of data was generated per second. By 2020, that number will increase to 105,800 **GB**

The average US company with more than 1000 employees stores more data than is contained in the US Library of Congress.

Gigabytes of data generated per second, by year



SOURCE: Cisco

[https://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-net-working-index-vni/vni-hyperconnectivity-wp.html#\\_Toc484556818](https://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-net-working-index-vni/vni-hyperconnectivity-wp.html#_Toc484556818)

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<https://books.google.ca/books?id=pyPwCwAAQBAJ&lpg=PT59&ots=jq0xOn9W4&dq=library%20of%20congress%201000%20employee%20companies%20data&pg=PT59#v=onepage&q=library%20of%20congress&f=false>

# Data Control

Large technology companies in today's "data-driven economy" make a living from harvesting personal data.

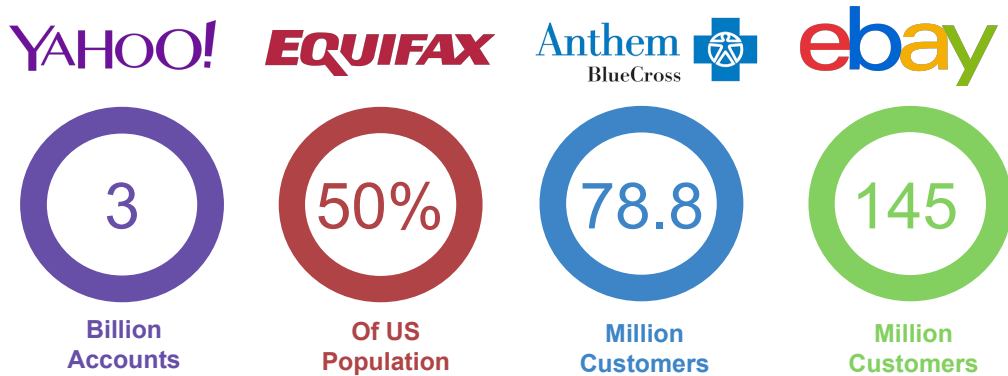
More than 1.8 billion people have given their personal information to Facebook for free - in order to like and share photos. Facebook monetizes this data. In 2016, 97% of their revenue came from targeted advertising.



<https://www.theguardian.com/technology/2017/jul/01/google-european-com-mission-fine-search-engines>

# Breaches of Trust

Centralized data storage leads to catastrophic breaches:



Dozens of companies exposing SSN, credit/debit card data, addresses, emails, phone numbers, bank usernames and passwords, Government data, access to medical company data, etc.

These data breaches are only some of the most publicized database breaches. This is likely to occur again as hackers attack central authority to obtain all this data. Regulators playing catch-up: Last year Google's parent company was slapped with a \$2.7bn fine for illegally promoting it's own price-comparison service in search results. Hijacked YouTube kids content.

Worse still, educational systems have seen a 68% increase in data breaches from 2015 to 2016 and are making a larger % of total data breaches, from 7.4% of all breaches in 2015 to 9% in 2016 and a continued increase in 2017.

<https://www.csoonline.com/article/2130877/data-breach/the-biggest-data-breaches-of-the-21st-century.html>

<https://www.statista.com/statistics/422115/distribution-of-data-breaches-usa-by-sector/>

# Virtual Rights

“ Everyone has the right to life,  
liberty, and security of person ”

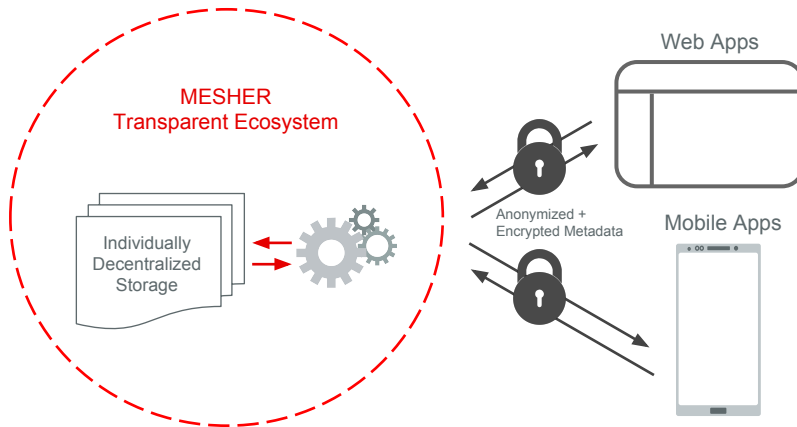
- United Nations: Article 3, Universal Declaration of Human Rights

Only through secure **Self-Governance** and **Individual Ownership** of data  
can we ensure that Human Rights **survive** the Virtual Age.

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Using the blockchain, Mesher empowers individuals to control their data with security while simultaneously helping companies to build applications more efficiently



# How Do We Control Our Data?

In order to self-govern data, users need to control and encrypt their data. Control involves transparency over personally identifiable information and personally generated data on 3rd party applications. They also need to be to know who is accessing Government controlled data about them.

## Personally Identifiable Information (PII)

Name, address, age, drivers licence #, passport #, email, DNA, etc.

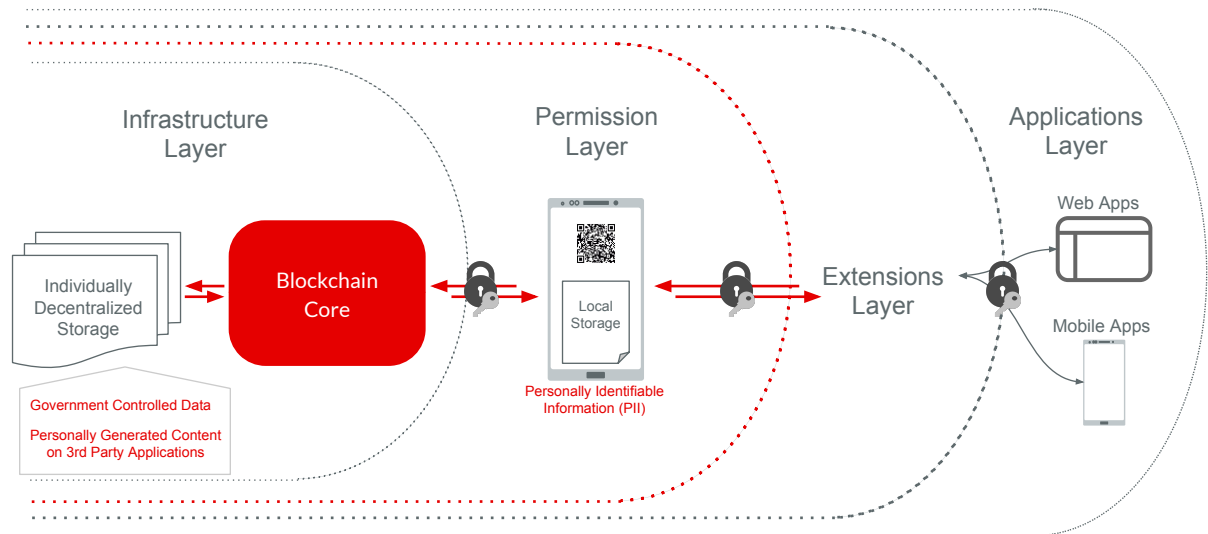
## Personally Generated Content on 3rd Party Applications

Social media sites, games, etc.

## Government Controlled Data

Electronic medical data, Tax filings, etc.

# Mesher Ecosystem





# Mesher Infrastructure

What features does the Mesher infrastructure need?

## Scalability

Using the blockchain for data confirmations only will greatly increase TPS (trans. per second)

## Security

All data storage and transactions are encrypted at industry level standards

## Stability

Allowing Mesher to migrate to new blockchain technologies to protect users.

## Storage

Decentralized storage using a hybrid system between a local user's device and existing cloud storage

Current public infrastructure being tested:

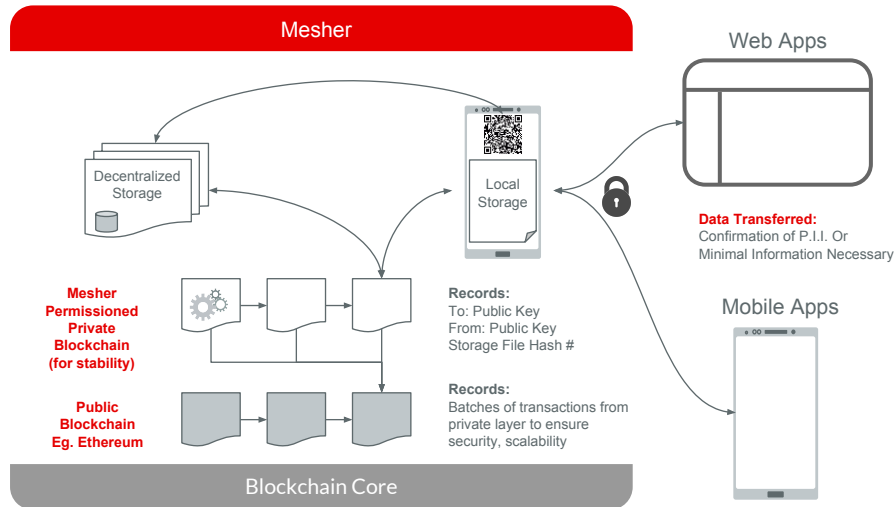
1)   Filecoin  
ethereum

2)  BLOCKSTACK

3)  EOS

# Mesher Infrastructure

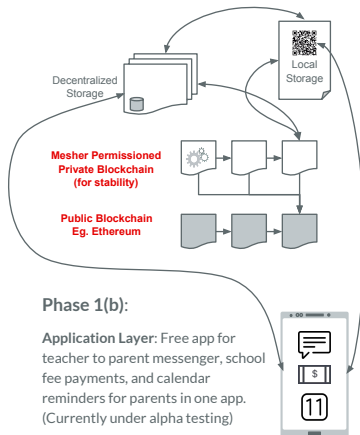
Phase 1



Focusing on mobile applications, only necessary information is sent. For example, to confirm identity, only a confirmation of identity is sent, nothing more. If a company or government requests other data, the user will be sent a request whereby they will confirm the data requested before sending the encrypted data.

# Mesher Product Roadmap

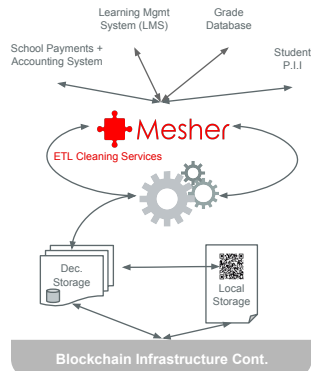
**Phase 1(a):** Build and test public blockchain options (Currently under testing)



## Phase 1(b):

**Application Layer:** Free app for teacher to parent messenger, school fee payments, and calendar reminders for parents in one app. (Currently under alpha testing)

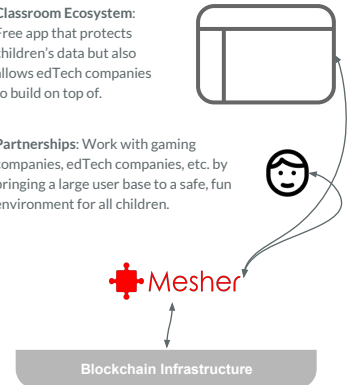
**Phase 2 (ETL):** Automate education data transmission to make data movement more efficient for school administrators, teachers, etc.



**Phase 3:** Creating a classroom dashboard for edTech companies and foster partnerships with non-edTech companies while protecting children and their data

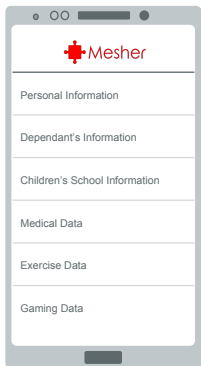
**Classroom Ecosystem:** Free app that protects children's data but also allows edTech companies to build on top of.

**Partnerships:** Work with gaming companies, edTech companies, etc. by bringing a large user base to a safe, fun environment for all children.

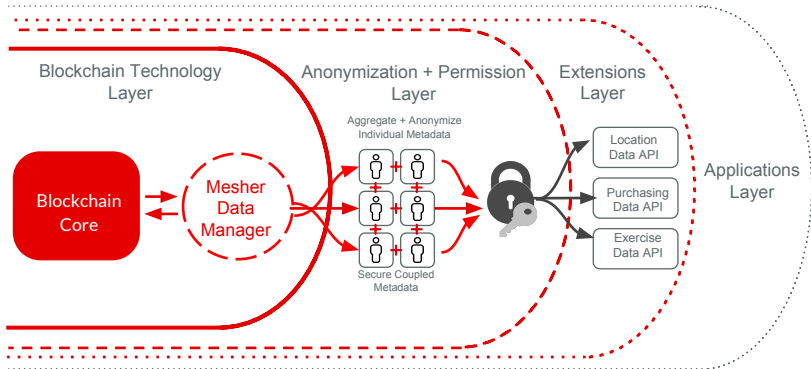


# Mesher Product Roadmap

**Phase 4:** Building out Mesher application to store medical records, driver's licence #, DNA data, exercise records, etc.



**Phase 5:** Monetizing adult individuals' secure data (through opt-ins by individuals) providing it to research agencies and companies in an anonymized manner to protect individual metadata. Returning 50% of revenues to individual providers for the privilege of accessing **their** anonymized data

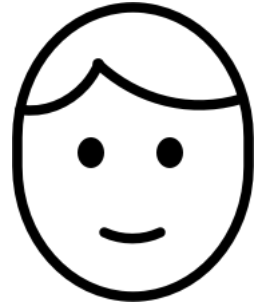


# Meshher Use Case

Young people are usually the main adopters of new technologies.

Parents try to manage their children's interaction with technology, and many schools are now requiring that students utilize various applications in class.

The relationship between teacher and parent requires communication and cooperation with greater attention paid to the underlying network infrastructure and how the data generated by and about children is managed.



Beginning with schools: connecting parents with teachers (& school systems)

Most new technologies that achieve network effect in a quick and lasting way do so by appealing to a younger, nascent market, at least initially. The biggest barrier and influence on the technologies children adopt, outside of their own peer circles, is their parents, and, increasingly, their educators. Parents create guidelines to manage their children's interaction with technology, and many schools are now requiring that students utilize various technologies.

The relationship between teacher and parent requires communication and cooperation, so there is massive opportunity to create stronger interfaces between the two networks, and greater attention paid to the underlying network infrastructure and how the data generated by and about children is managed. Since children are our most at risk group and data breaches have increased significantly in the education sector the past few years, we will focus on the education system.

# Timeline

## Q1 - 2018:

- Release final draft of white paper
- Launch Mesher application
- Launch Mesher website
- Build Mesher ETL system

## Q2 - 2018:

- Token launch
- Sandbox testing of Mesher application on blockchain core
- Completion and testing of Mesher ETL system

## Q3 - 2018:

- Pilot test Mesher ETL system
- Build and test Mesher Dashboard

## Q4 - 2018:

- Build and test Mesher Login feature
- Build out full Mesher application
- Launch Mesher ETL system for schools

## Q1 - 2019:

- Deploy governance system
- Test full Mesher application
- Begin partnering with gaming companies and edTech companies with Mesher Login

## Q2 - 2019:

- Begin partnering with various agencies to store data in a secure, decentralized manner through Mesher
- Expand Mesher ETL system to non-school systems
- Building and testing of aggregation and anonymization infrastructure

## Q3 - 2019:

- Pilot test Mesher ETL system
- Build and test Mesher Dashboard
- Beta testing aggregation and anonymization infrastructure

## Q4 - 2018:

- Launching aggregation and anonymization infrastructure
- Distributing revenue from anonymized data from 3rd parties to token holder beneficiaries

# Mesh Coin

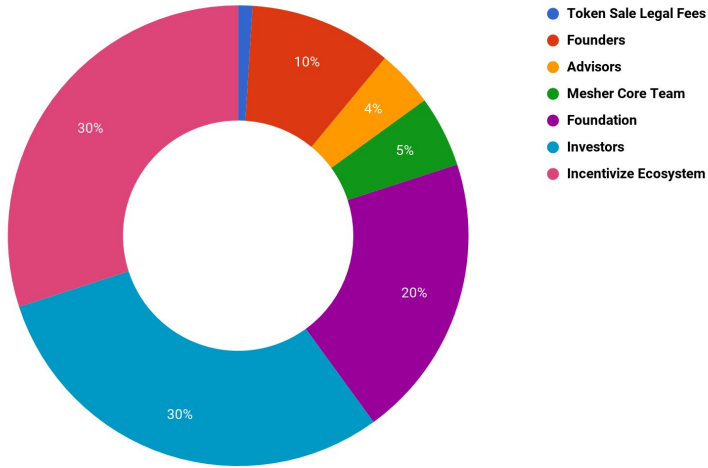
Mesh Coins are required to participate in the network for:

- **Data** - requests from companies, research agencies, etc. (non-individuals)
- **Payments** - minimal to no transaction fees, powering other currencies (fiat or crypto)
- **Governance** - to build a stable and secure network for individuals, Mesher will have to be able to adjust its infrastructure independent of Bitcoin, Ethereum, etc.
- **Mesher Login** - to power games and other applications built with Mesher's ID and Governance platform

No transaction fees will be charged for interacting within the network between individuals (eg. messages between parents and teachers)

# Token Sale

## Token Allocation





# Token Economics

Genesis block tokens are locked up for a period of time and are time released over 4 years

Unlike Bitcoin, where 2.75% of holders own 95% of all Bitcoins, Mesher will distribute tokens on a weekly basis for at least 1 year

Mining releases new tokens into the ecosystem, declining in the amount of tokens as usage increases

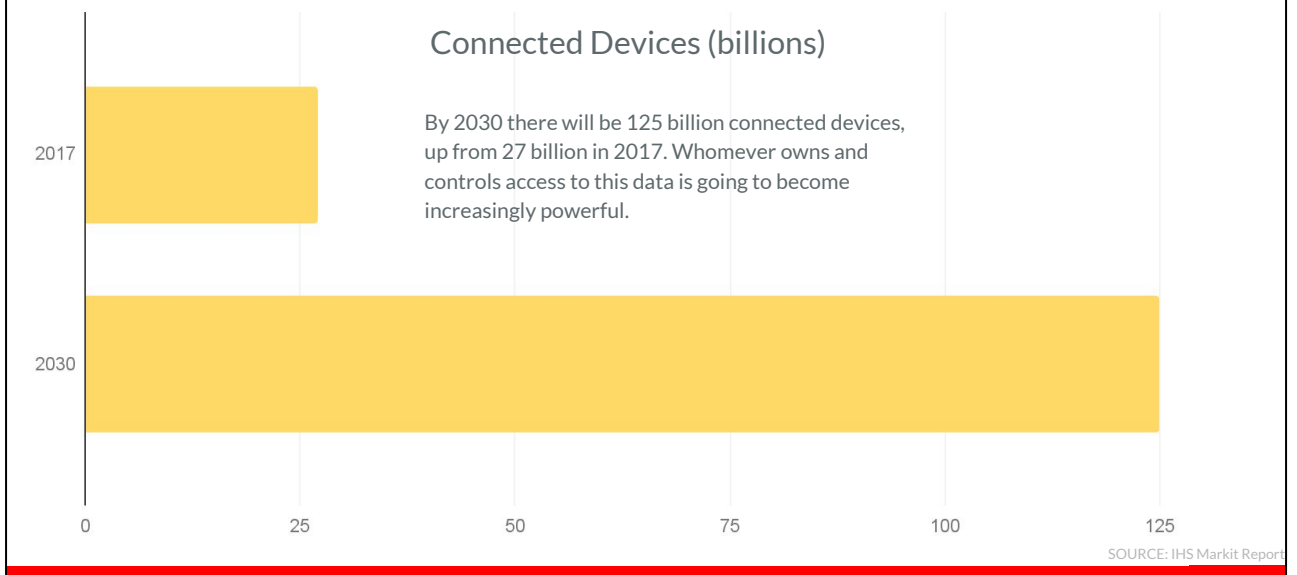
After all tokens are released from the genesis block, inflation will be maintained at 2%

SOURCE: [Bit Info Charts](#)

The image shows a cover page for an 'APPENDICES' section. It features a solid red background with a vertical grey bar on the left side. The word 'APPENDICES' is written in white, bold, uppercase letters, centered horizontally and positioned in the upper half of the red area.

# APPENDICES

## Increased Connectivity



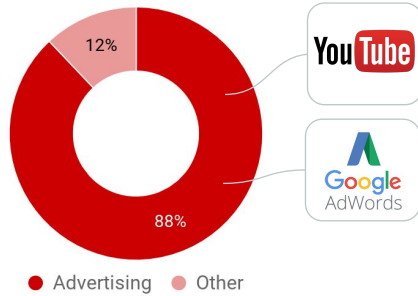
<https://technology.ihs.com/596542/number-of-connected-iot-devices-will-surge-to-125-billion-by-2030-ihs-markit-says>

# Data Usage Today

The core business model of both **Alphabet (Google)** and **Facebook** is targeted advertising, driven by their monopoly on user data:

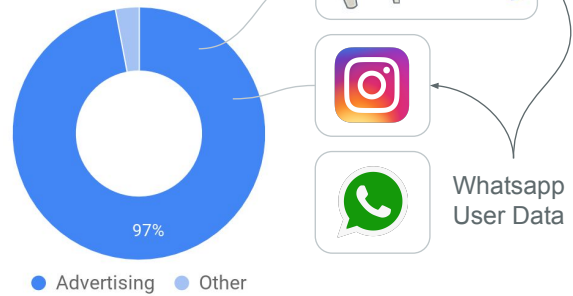
## Alphabet

2016 Revenue: \$90bn



## Facebook

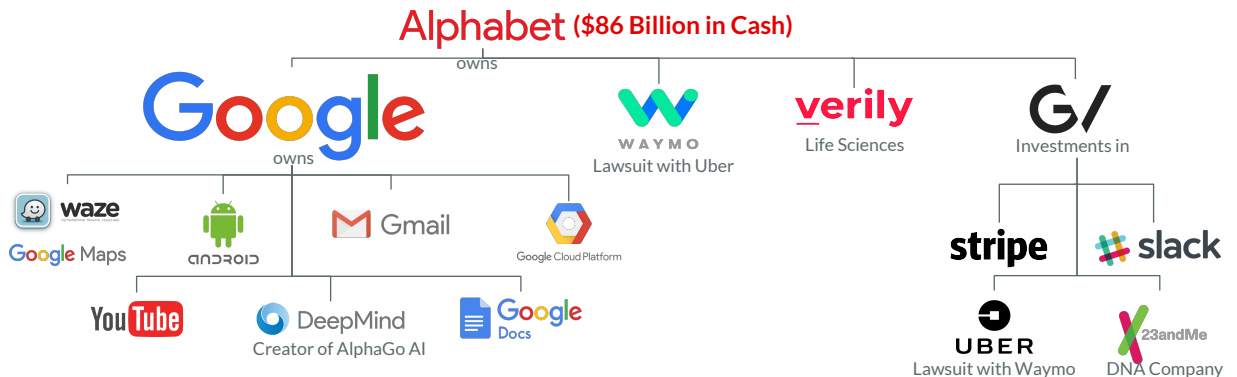
2016 Revenue: \$28bn



SOURCE: Company Annual Reports FY2016

# Data Usage Future

Technology companies using their cash to expand into new industries and have access to more of your data:



Today, Google uses your data (location data from Waze and Google Maps, your Youtube Searches, Gmail messages, Hangouts, Android Pay, etc. to learn about you and push advertising to you. Tomorrow, they will be driving you around using Waze, access your health data through Verily and DeepMind (they are testing in the UK right now!), all the while see everything you do on Android. In November 2017, Quartz reported that Google was tracking your location even when your settings had it turned off.

Google can buy Uber, 23andMe, Stripe and Slack with the cash it currently has.

<https://qz.com/1131515/google-collects-android-users-locations-even-when-location-services-are-disabled/>

# Benefits of Blockchain

## Bitcoin/Blockchain Background

- Bitcoin - Satoshi Nakamoto started it all when he published the Bitcoin whitepaper. It is considered the most secure blockchain today due to the size of the community mining coins.
- Ethereum - In order to build dApps (decentralized applications), Ethereum introduced the concept of smart contracts, allowing anyone to build applications on top of the blockchain.

## Benefits of Blockchain

