

**Historic Colonialization, Data Colonialization,
and Data Democratization with BestFit**

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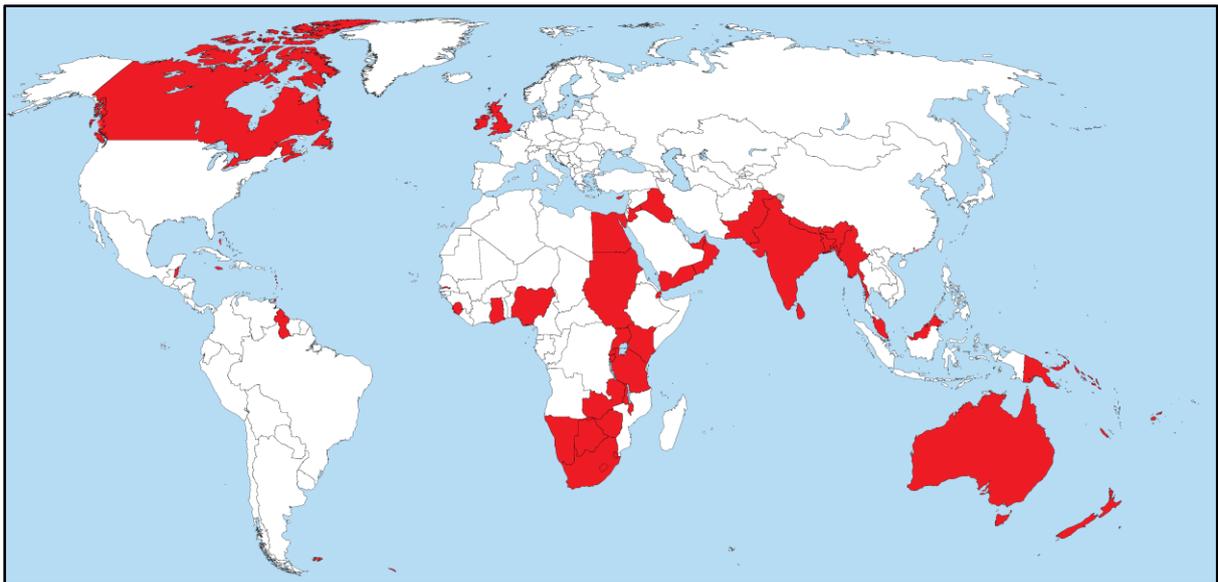
Historic Colonialization

From Alexander the Great to the Soviet Union, men have created empires by colonizing peoples and places. At its height, the Roman Empire included North Africa, the Middle East and much of Europe, while the great explorers of the Renaissance enabled Spain, Portugal and Britain to establish colonies in Africa, Asia and the “New World,” to the extent that entire continents were under the rule of foreign powers. Once having established control, the colonizing nations were able to exploit the natural resources of the colony and the—frequently forced—labor of its colonists. They then exported raw materials back to the homeland and subsequently sold the resulting products back to the native people.

The greatest of all empires was Britain’s. At its height, it was the largest empire in history and was world’s foremost power for over a century. By 1913, the British Empire ruled over 412 million people, 23% of the planet’s population and, by 1920, covered 35,500,000 km² (13,700,000 mi²), or 24% of the world’s total land mass.

Even more than control over populations and territory, the real “raison d’être” of the British Empire was economic. In 1870, Britain contributed 24.28% of global GDP, compared to the U.S.’s 8.87%. Of this, more than 50% came from the British Raj (i.e., India, Pakistan and Bangladesh).

British Empire



Data Colonialization

Fast forward to 2020. While most colonies have gained their independence, a different type of colonisation exists today. Rather than exploiting nations for their natural resources and as markets for their goods, companies rather than countries have created their own empires using customer data.

Three companies stand out as data colonizers and they are three of the world's five largest corporations: Google, Amazon, and Facebook.

Company	Market value in USD as of January 16, 2020
Alphabet (Google's parent company)	1 trillion
Amazon	931 billion
Facebook	632 billion

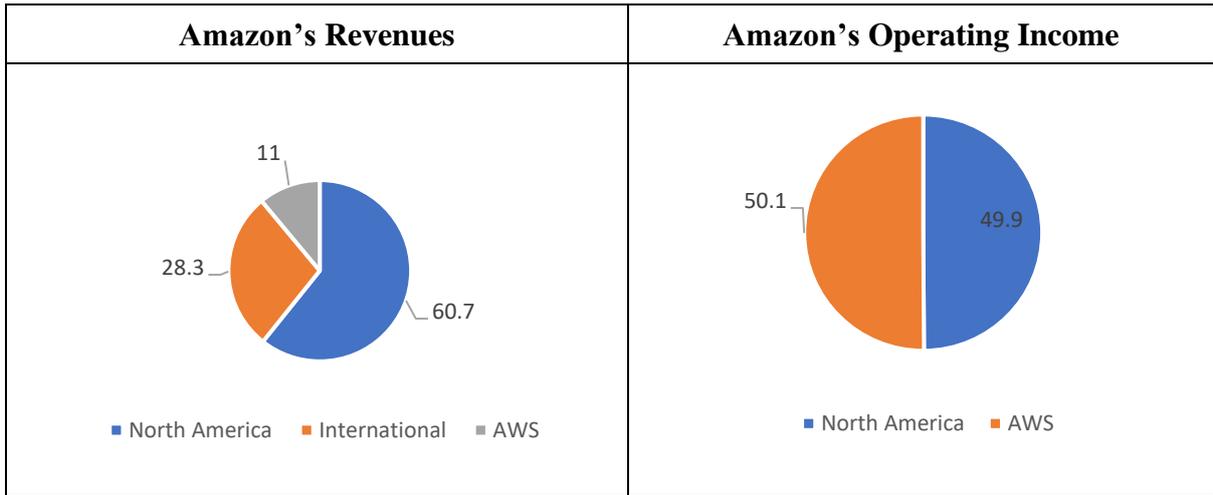
Amazon

From having started selling books, Amazon now offers its own video and music content and retails items from blouses to shampoo to gardening trowels. With its 2017 purchase of upscale grocery chain Whole Foods for USD 13.7 billion, Amazon even has a bricks and mortar presence, as well as being able to offer U.S. consumers online food shopping.

In 2018, Amazon controlled 49% of the US ecommerce market. Each month, about 197 million people visit Amazon. In addition to its own offerings, Amazon provides an online platform to more than eight million third party sellers. In IVQ2019, Amazon's revenues were USD 87.44 billion and unit sales from third party sellers represented 53% of all sales. In the US alone, 150.6 million users accessed Amazon.com via their mobile app in September 2019 and in June 2019 there were 105 million customers with Prime accounts.

In addition, since 2006, Amazon has offered organizations cloud services. Amazon Web Services (AWS) provides a broad set of global computing, database storage, and other service offerings to businesses, government agencies and academic institutions that allow them to store information and deliver content.

The graphs below show Amazon's business mix.



Amazon's use of customer data is evident in ad placement, the "people who purchased this also..." information that appears on each page as well as persistent emails suggesting other products in which a person might be interested, based on his previous orders.

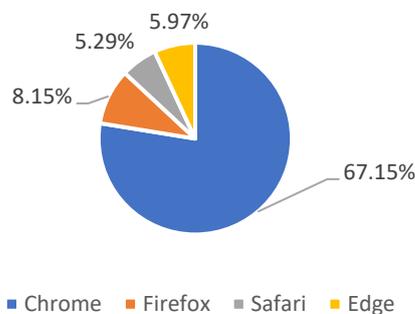
Google

Google, whose parent company is Alphabet, is the world's predominant search engine, accounting for more than 90% of all online searches. Its email product, gmail, has a 27% share of the global client email market. Google gets more than 63,000 searches per second, or around 5.6 billion searchers per day and at least 2 trillion searches per year. 15% of all search queries are asked for the first time. Before delivering its results, Google takes over 200 factors into consideration, some of which are controversial.

Google's parent Alphabet owns Android, the mobile phone operating system which, as of May 2019, is used by 2.5 billion people globally. This compares to 1.4 billion users of Apple's device operating system.

Alphabet also owns the web browser Chrome. Chrome is by far the most popular of the web browsers, as shown in the chart below. Note that Firefox is Mozilla's browser, Safari is Apple's and Edge is Microsoft's.

Usage share of desktop browsers, November 2019

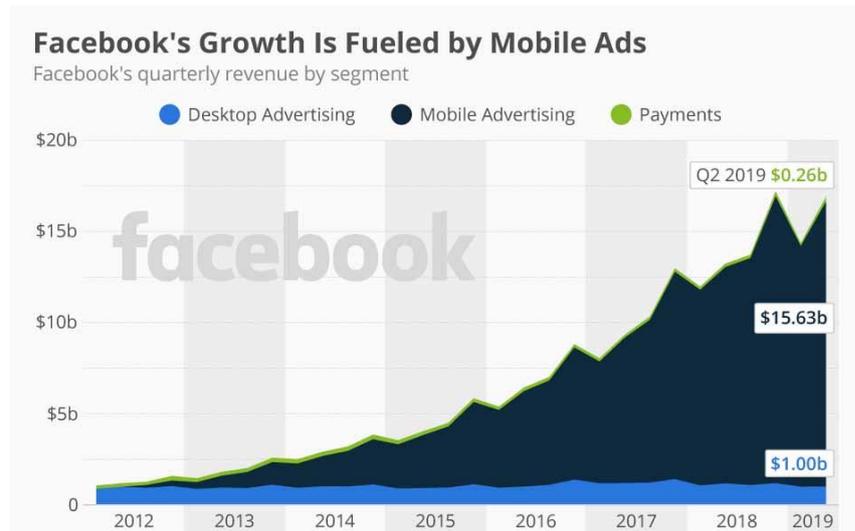


Chrome is also the predominant browser for mobile phone users, with 63.8% of the market, vs Apple Safari's 19.7%.

Google had USD 160.7 billion of revenues in 2019, of which USD 134.81 billion was from targeted advertising that leveraged user data.

Facebook

Facebook had 2.5 billion monthly active users in IVQ2019. The same quarter, Facebook had USD 21.08 billion of revenues, most of which were generated through advertising. In IIIQ2019, Facebook had seven million active advertisers. The chart below indicates that the lion's share of Facebook revenues comes from ads, and most of that from mobile ads.



Facebook tracks users employing post likes and shares, as well as the likes and shares of their friends, and displays ads accordingly. A teenage boy will not see an ad for face cream, nor will an older woman see one for the latest video gaming console.

The Cambridge Analytica scandal, in which Facebook allowed user data to be exploited for political purposes, was followed in December 2019, when the names, user IDs, and phone numbers of more than 267 million people were exposed online.

Data is the New Oil

As *The Economist* stated in 2017, data is the new oil as a source of corporate wealth. And, like oil, individuals are being “colonized” for their data by “big tech” in a process over which they have little control or benefit.

Unlike oil, the supplies of data seem to be limitless. An autonomous vehicle produces as many as 30 terabytes of data for every eight hours of driving. This is the equivalent of the data held on 6,400 DVDs. IDC projects that, globally, 90 zettabytes of data will be produced in 2019-2020, which is the equivalent of 19 trillion DVDs. (A zettabyte is one sextillion, or 10^{21} , bytes.) According to *The Economist*, that is more than all the data produced since the computer was invented.

In 2018, data was worth USD 178 billion globally. Data “brokers,” who can track thousands of an individual’s data points, generated USD 21 billion in revenues the same year.

Analyzing data is also profitable. Kaggle, owned by Google, sponsors machine learning contests for the development of algorithms that best identify a “deep fake” video or predict a building’s energy use, with prizes awarded of as much as USD 1 million. Data analysis can

also be said to be Facebook’s and Google’s business model. These tech giants rarely market pure data but do sell insights about prospective customers.

The process is summarized below.



In 2019, a Canadian government agency sought to calculate the value of the nation’s data and estimated its worth at between USD 118-164 billion. If the model is accurate, the value of America’s data, whose GDP is twelve times Canada’s, would be between USD 1.4-2.0 trillion, or the equivalent of 5% of U.S. private physical capital.

When it comes to data, the old adage, “knowledge is power,” has never been so true.

Colonialization of Services

At the same time that people’s data is being exploited by “big tech” for commercial purposes, there has been a corresponding reduction of the services offered to ordinary people. Bank tellers are being replaced by ATMs and supermarkets are substituting barcode readers for cashiers in a process euphemistically called “rightsizing personnel.” In many cases, only high net worth individuals (HNWI) receive personalized service offerings from brokers, insurance companies and other providers of services.

Data Democratization

Origin of words

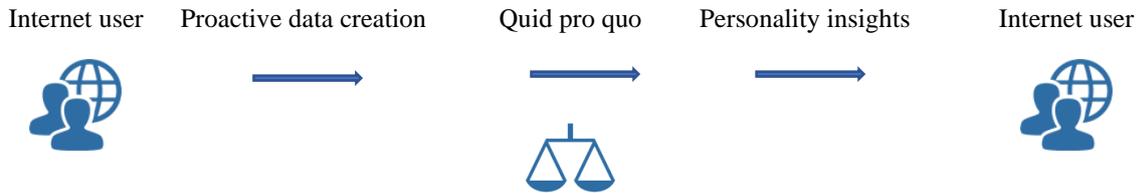
Democratization refers to the movement from an autocratic, or authoritarian, colonial regime to one where the people have control over the political process.

In 2020, data democratization refers to an individual’s being able to take control of personal data—how it is used and who profits from it. The EU’s General Data Protection Regulation (GDPR) was passed into law in April 2018 to ensure greater data protection. It stipulates the following key principles for the treatment of personal online data:

- Lawfulness, fairness and transparency
- Purpose limitation
- Data minimisation
- Accuracy
- Storage limitation
- Integrity and confidentiality (security)
- Accountability.

Quid Pro Quo – the Democratized Data Process

When data is democratized, the profiling process can be summarized as follows:



The user maintains control of his data, and is able to amend, to share, or to keep private. Data democratization establishes a quid pro quo between the individual and the entity with whom the data is communicated. It respects the principles of the GDPR.

BestFit’s User Benefits

Enter BestFit. BestFit is a platform that solicits data from an individual with his full knowledge and consent in a manner that is both engaging and entertaining. It is quick to complete and returns a customized analysis in the form of a personality profile. The profile can be shared or remain private. It can even be amended so that the user can evaluate the impact of varying responses based on his self-assessment. The individual maintains control and is the main beneficiary of the data.

At the same time, BestFit enables democratization of *services*. With the personal data the individual provides, companies can offer unique solutions that would normally only be available to an elite few. One need not be wealthy to receive the best and most suitable offers from a company. BestFit makes sure a person receives full value for sharing his data and does not take advantage of his trust. Its quid pro quo results in enhanced profile reporting and:

- Stimulating experience
- Personalization
- Spam reduction
- Bespoke offers
- Social sharing

