



Living with Big Tech, Social Media & AI

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Autumn 2025

How did you get on with your homework?

Analyse the adverts that get served up to you via social media
Can you work out how they are linked to you?

Age appropriate
Internet searches
Purchase history
Your phone activity
Household appliances

Bonus challenge:

Use Alexa or Siri to search for something completely new.
See if/how long before you see a related advert

Week 2

*“To know where we’re going,
we have to know where we are.
To know that, we have to know
where we came from & how we got here”*



How did SM become the digital junk food of our age?

What does social media actually do?

Social networking

Instant messaging & microblogs

Video sharing

Video microblogs

Photo sharing

Social bookmarking

Business networks

Collaboration

Online gaming

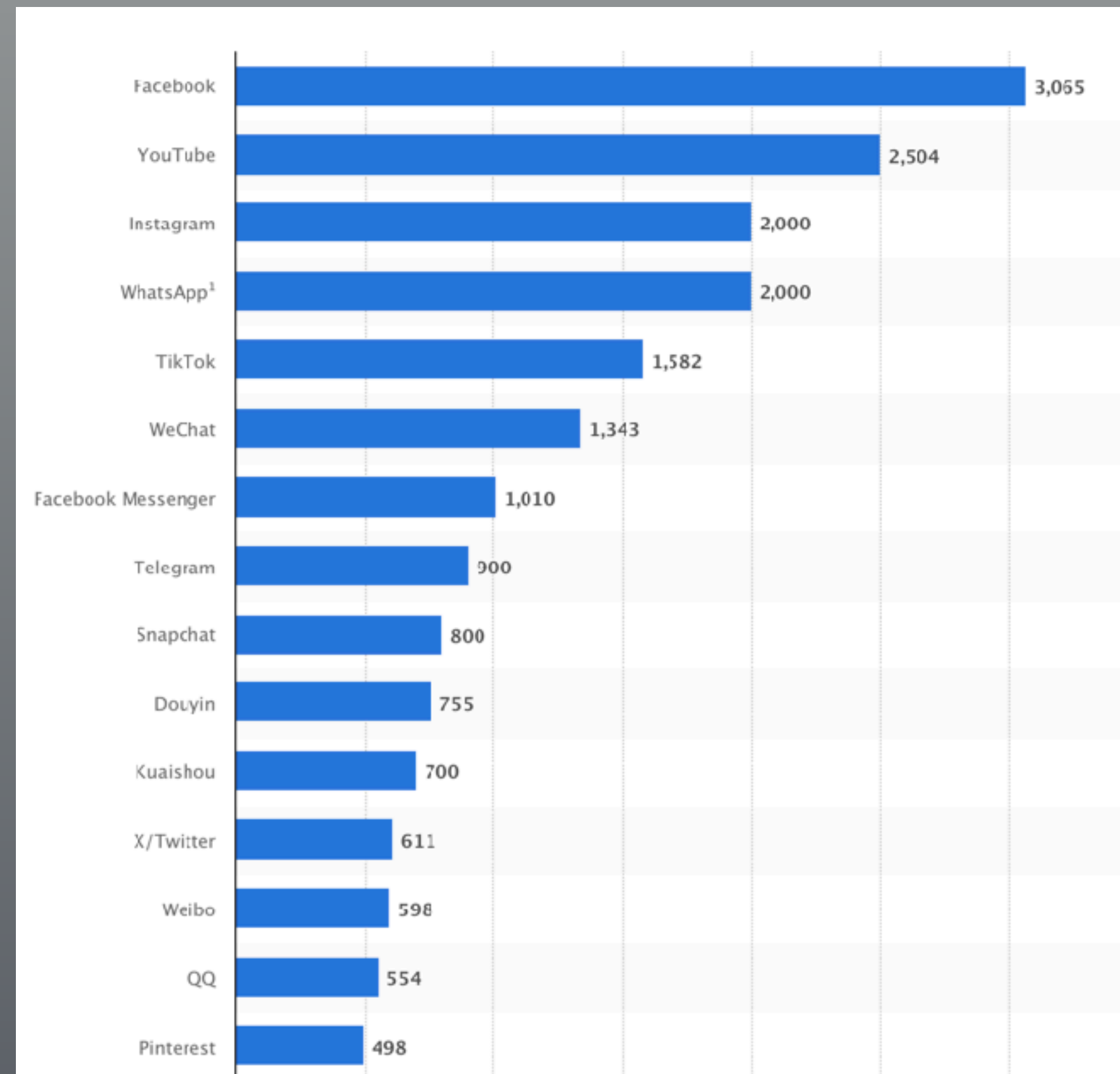
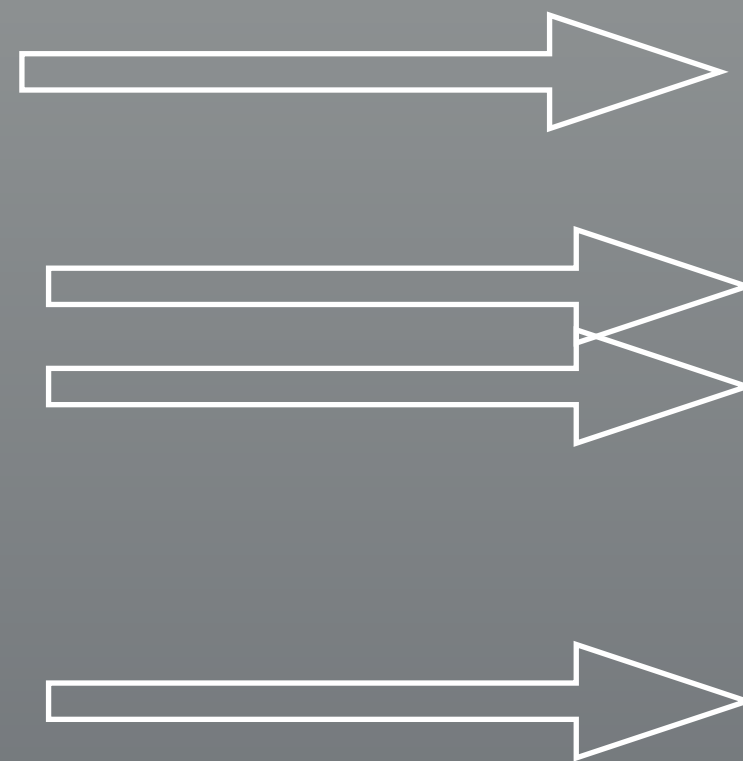
Virtual Worlds

Who are the main players in social media?



Numbers of users of social media

Numbers of global users, April 2024



Meta owns 4 of 7 largest social media sites by usage
3+ bns user/ month globally

Source: Statistica

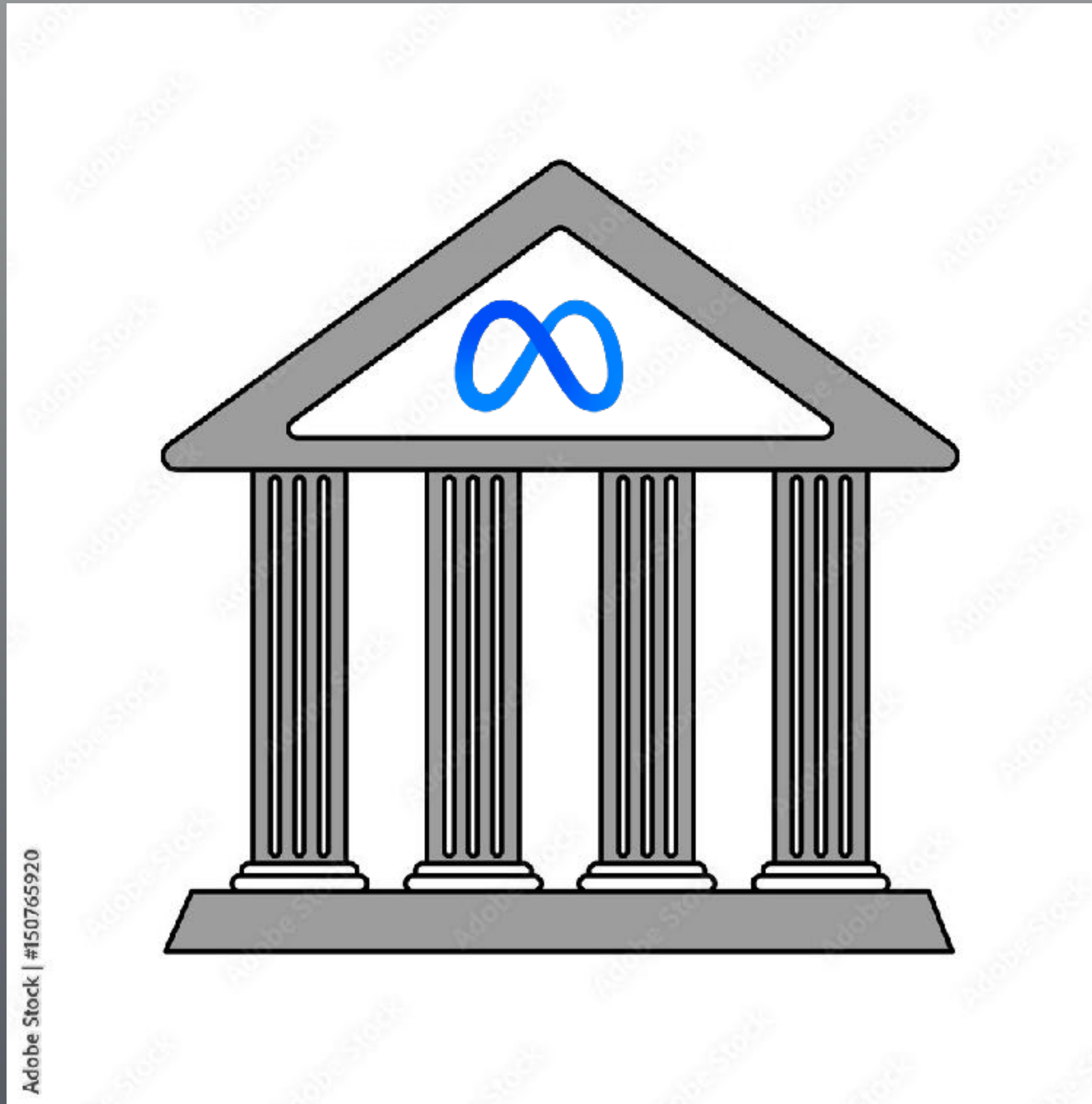
The four pillars of social media

Corporate ownership

Business model

Technology

Regulation





Corporate Ownership

How we got here

2004 The Facebook launched

2006 turned down \$1bn takeover offer from Yahoo



2012 bought Instagram for \$1bn

2012 Facebook's IPO (valued company at \$104bns)

2014 bought WhatsApp for \$19bns



2021 changed company name to Meta



Mark Zuckerberg owns a controlling interest

Where we came from



All started so optimistically in mid-1990s

"Be Connected. Be Discovered. Be on Facebook."

Internet mantra

"Information should be free & universal"

Implicit social contract with users

Free service exchange for "digital exhaust"

Some milestones along the way

Advent of internet enabled smartphones
(iPhone 2007)



App design optimised for mobile phones

Continuous scrolling

“Intermittent variable reinforcement”

2012 Purchase of Instagram

Significant social media software features

2005 introduction of News Feed

2008 “Likes” and comments

2009 Retweet on X/Twitter

2010 Creation of Groups

Contagion Study - an example of Facebook's experimentation on users

2012 experiment with approx 600,000 users

Two groups of FB users:

- reduced the positive content within the NewsFeed
- reduced negative content

Observed whether subjects subsequent messages reflected a change in mood

The results were statistically significant, but only to a small extent

Ethically questionable study

<https://ideas.ted.com/need-to-know-about-facebooks-emotional-contagion-study/>

Business model

Your digital footprints are commercially valuable

Data sources that contribute to your online profile:

Phone - use of apps & location

Internet browsing history

All Facebook apps

All purchases

YouTube history

Alexa, Siri & any other listening device eg. TV

Household appliances eg Doorcams

Car telematics

Gleaned & packaged by third party agregators then sold to advertisers

How come these companies have so much information about us?

Because we have given them permission, for example:

We don't charge you to use Facebook or the other products and services covered by these Terms, unless we state otherwise. Instead, businesses, organisations and other persons pay us to show you ads for their products and services. ... You acknowledge that by using our Products, we will show you ads that we think may be relevant to you and your interests. We use your personal data to help determine which personalised ads to show you.

Facebook's Terms & Conditions

Other companies' ToS are similar

The fundamental contradiction

Key social media metrics are:
“engagement” & frequency of use

Over-riding aim is to keep users on their platform

Continual stream of prompts & suggestions based on Likes, reactions, shares & news feeds

More important than accuracy or balance

The more contentious the material the more likely it is to be shared

“if it enrages it engages”

Amplified by confirmation bias & selective perception to create *echo chambers*

“You will find the world you seek”

Social media business model

Soshana Zuboff

Views our private personal experience as raw material
(from multiple data sources)

Generate predictive models of human behaviour
“behavioural surplus”

Asymmetry of power between users & platforms

Creates one way mirror

Users are not customers of social media

Have become “behaviour modification engines”

“surveillance dividend” commercial benefit of behavioural change



“If you’re not paying for the product, then you are the product”

Example of social media activity influencing real world behaviour

Pokemon Go launched in 2016. Hugely popular



Basis of the game was finding digital characters in the real world

Location of characters and routing was algorithmically determined

Players were routed passed venues that sponsored the game

Business model

“Now that we have your attention, let’s monetise it”

2004 - 2009 FB was funded by investors

2007 enter Sheryl Sandberg, ex Google VP

Selling advertising, not products

2009 becomes profitable, based on banner adverts & pop-ups

Move to Adwords-like auction to advertisers turbo-charged ad revenue



AdWords example

Google search for “Hotels in York city centre”


Keywords: *york, hotels, city centre*

Descriptors of hotels, such as:
modern, luxury, boutique, flexible rates, best prices

Automatic auction based of advertiser bids

Massive premium on placement on first webpage.

Meta uses similar online digital auction

 Booking.com
https://www.booking.com › YorkCityCentre › Hotels

...

55 Hotels in York City Centre | Best Price Guarantee. AD


Book your **Hotel** in **York City Centre** online. No reservation costs. Great rates.

Hotels at Great Prices
No Hidden Fees Price Match Guarantee

Top Reviewed Hotels
Compare Accomodation Now Quick & Easy to Book

Homes, Apartments & More
A Home Away From Home Choose Your Perfect Stay


Book Now
Quick, Simple, Easy to Use No Reservation Costs. Great rates

 Hilton
https://www.hilton.com › York › Hotels

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Explore Somewhere New & Make Your Stay In York Memorable With Hilton. Book Direct & Save On Flexible Rates And Cancellation.
Book Direct for Free Wifi - Flexible Cancellation - No Booking Fees
Brands: Hilton, Waldorf Astoria, Conrad, DoubleTree
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 Tripadvisor
https://www.tripadvisor.co.uk › HotelsList-York-City-Centre-Hotels-zfp8816.html

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THE 10 BEST York City Centre Hotels 2025 (Prices) - Tripadvisor


Oct 1, 2025 · Compare prices, ratings, and amenities of 31 downtown **hotels in York**, near top attractions like National Railway Museum and **York Minster**. Find the best **hotel** for your budget, style, and preferences with Tripadvisor reviews and photos.

 Booking.com
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The best hotels in York City Centre, York, United Kingdom

Book your **hotel** in **York City Centre, York** online. But where exactly? Find all **hotels** in **York City Centre, York** on a **city map**. No reservation costs.

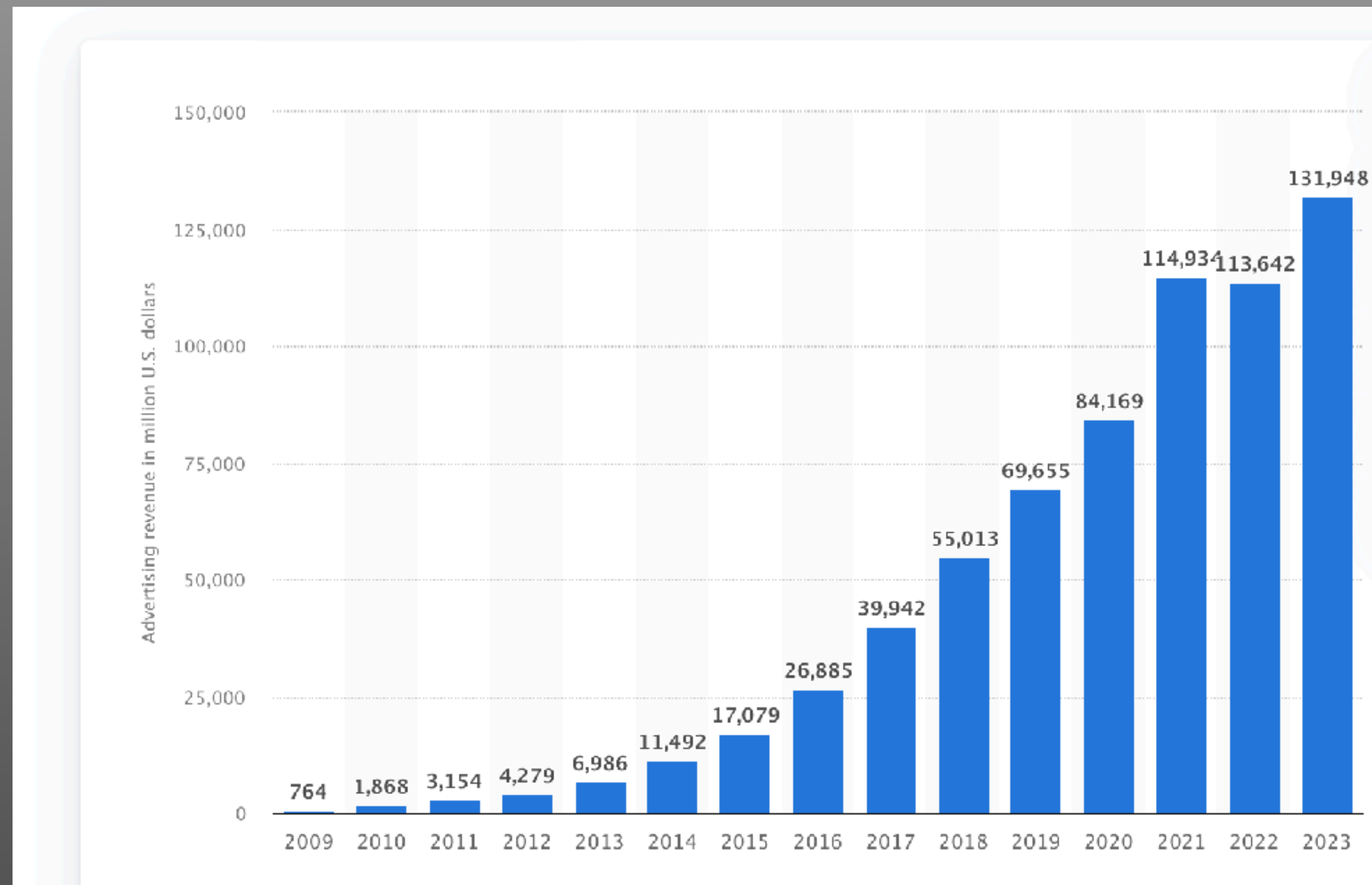
 Visit York
https://visityork.org › business-directory › category › stay › hotels

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20+ Best Hotels in York | Hotel Deals

Uncover the heart of **York** by staying at premium **city centre hotels**, where you can conveniently explore the **city's** captivating attractions. Alternatively, venture outside the bustling **city** and immerse yourself in the serene beauty of North Yorkshire's countryside, where you'll find an array of exquisite...

Facebook's Advertising Revenues 2007 - 2023



Source: Statista

Who decides what you see?

Algorithms

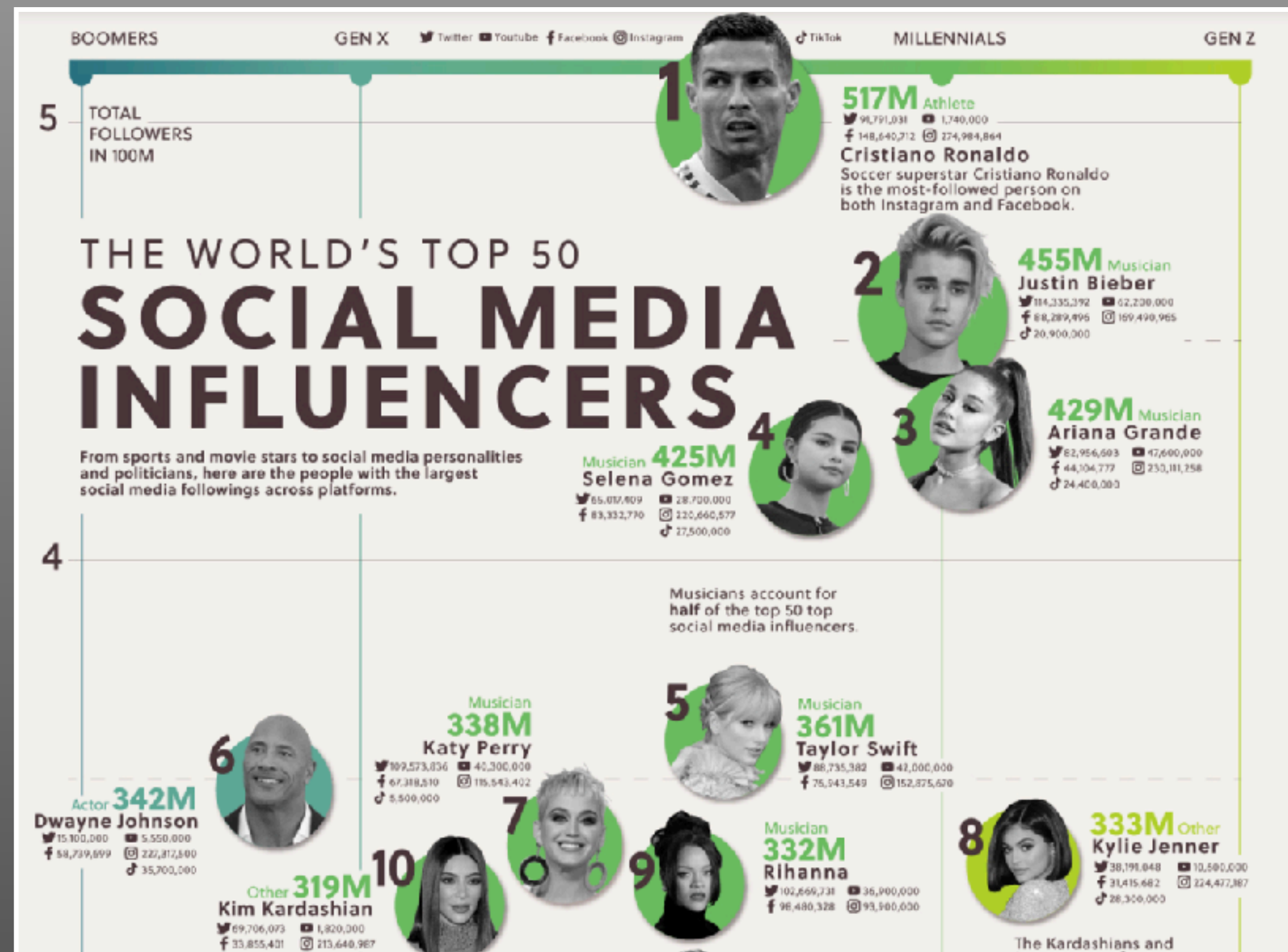
Based on your personal profile

Commercial considerations eg Adwords auction

Owner's whim in the case on x/Twitter

Content moderators in case of controversial posts

The role of “influencers”



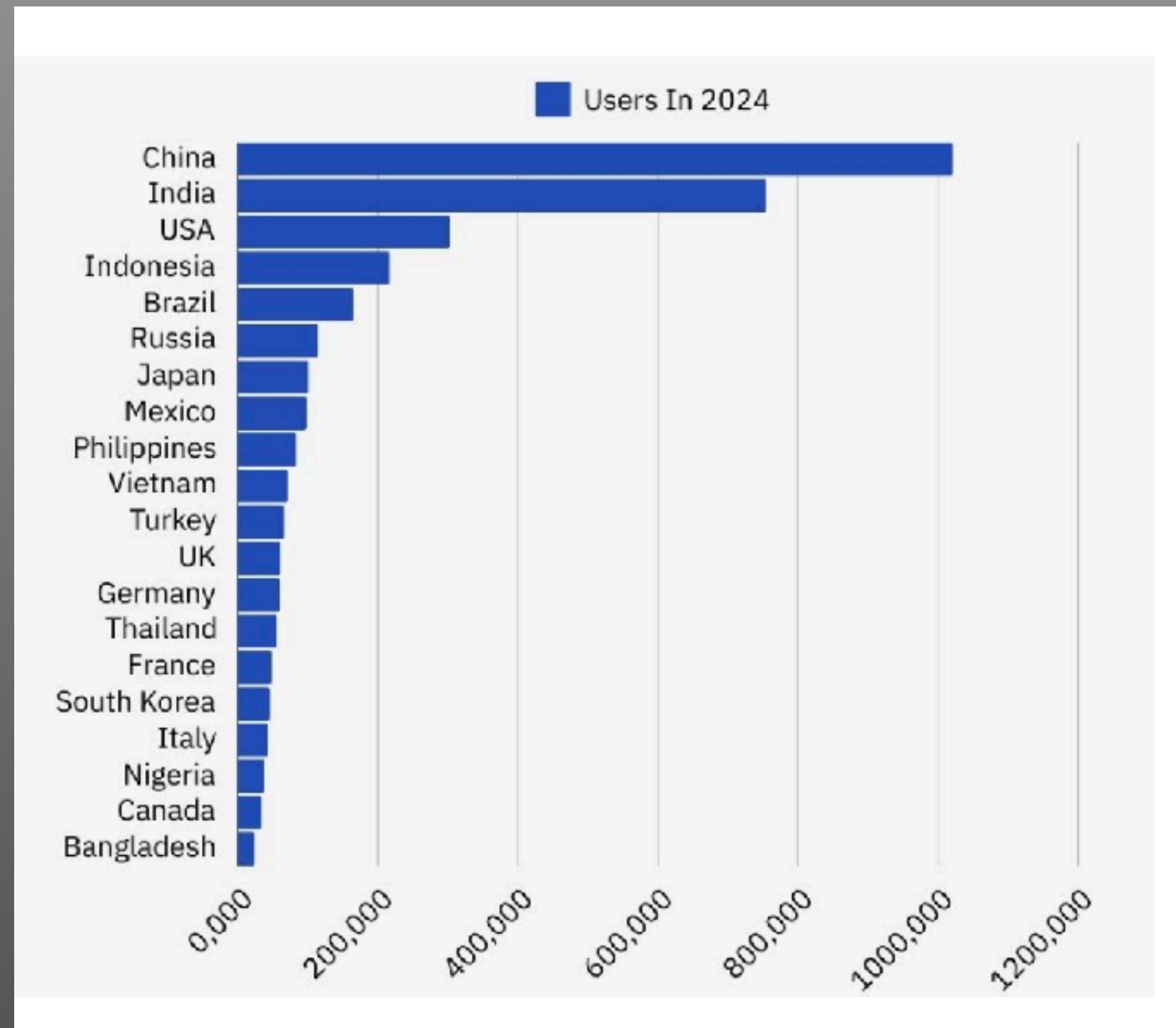
Influence consumer behaviour by having a on more personal connection with user

Greater likelihood to swaying purchasing decisions

Used to influence public opinion in US 2024 presidential election by both parties

Influencers have become central to social media marketing at all levels

Going global - the growth imperative



Source: Priori Data

Facebook drive for growth over profitability in developing countries

Agreement with local mobile phone companies to provide Free Basic service

FB pre-loaded onto mobile phones & no data charges.

FB has become the *de facto* internet in many countries

Regulation:

How social media companies became “neutral platforms”

No provider or user of an interactive computer service shall be treated as the publisher or speaker of any information provided by another information content provider.

Section 230

Communications Decency Act, 1996

Defined as “neutral platforms”, crucially not publishers

Has been described as “*the twenty-six words that created social media*”

Implications of becoming neutral platforms

Exempted internet platforms from legal liability for content authored by third parties.

Users could post anything provided it was not illegal

Social media companies were not required to fact check or verify users' posts

In US, First Amendment rights to free speech protected almost all opinions

Fact checking by main stream media only started after 2016 US election

Despite growing list of concerns about social media

Breaches of users' data privacy

Spread of mis- & dis-information, conspiracy theories, hater speech

Political influence in elections worldwide

Social harm, especially among women & girls

Profitability perceived as more important than accuracy or user safety

Homework Assignment




Look at use of Adwords in your searches

Download your data from Facebook

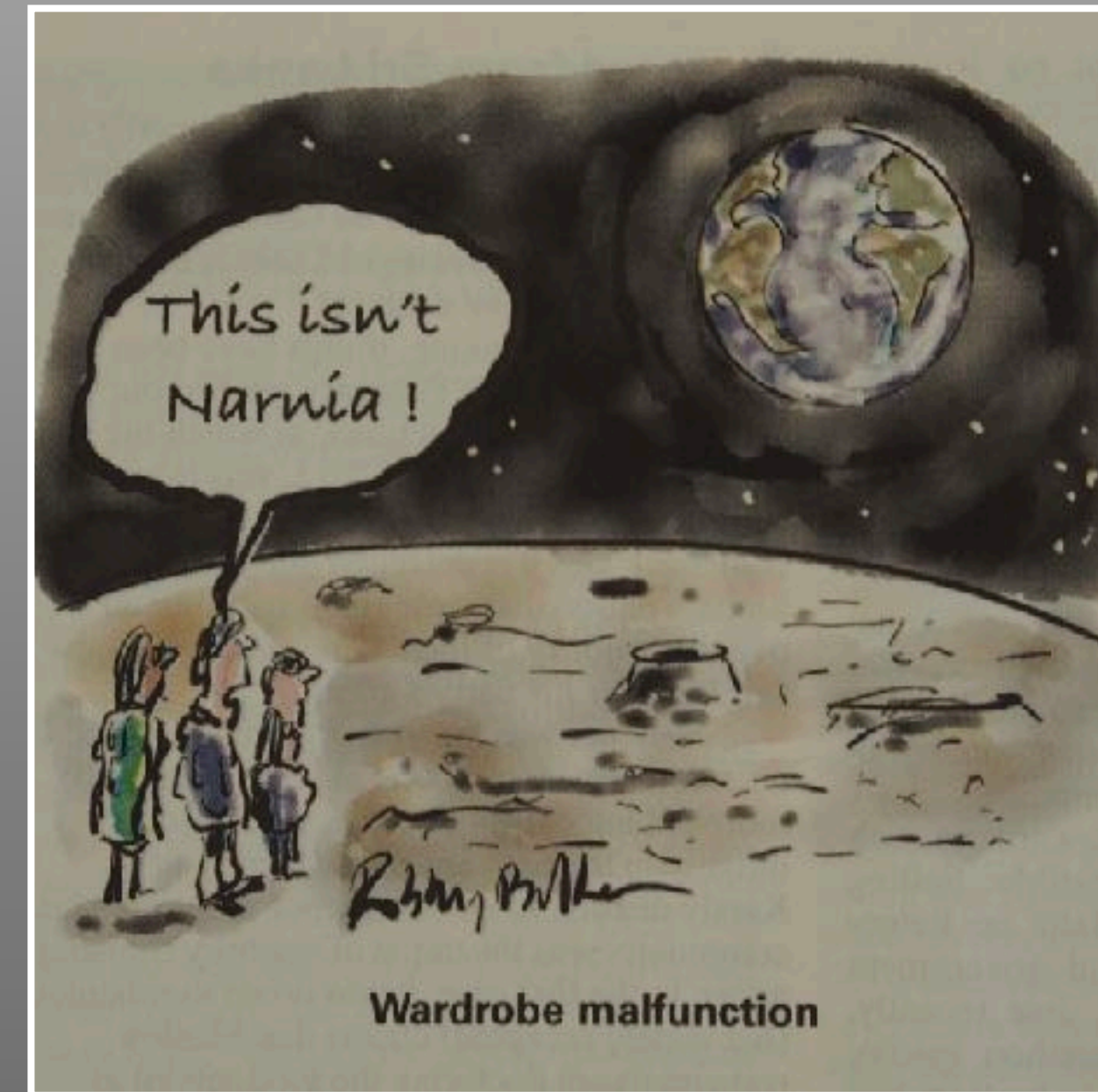
Step-by-step guide to downloading what Facebook knows about you

Export your Facebook information from Accounts Centre to a device

1. Click on your profile picture in the top right, then click **Settings and privacy**.
2. Click  **Settings**.
3. Click **Accounts Centre**, then click **Your information and permissions**.
4. Click **Export your information**.
5. Click **Create export**.
6. Select the profile that you'd like to export information from.
7. Select **Export to device**.
8. From here, you can choose specific info to export and select a date range, format, notification email address and media quality.
 - Learn more about exporting [data logs](#).
9. Once you have customised your export, click **Start export**.

Next week

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The societal impact of social media