

# **How have the growth rates of various social media platforms evolved, and what are the underlying factors driving user adoption and engagement?**

Shreya Sharma

-----  
Date of Submission: 04-11-2024

Date of Acceptance: 14-11-2024  
-----

## **I. Introduction**

Social media platforms have experienced remarkable growth over the past two decades, transforming the way individuals, businesses, and societies communicate and interact. As the popularity of social media platforms continues to surge, it is essential to examine the factors that contribute to this rapid growth and widespread engagement. One of the key driving factors behind the adoption and sustained usage of social media platforms is the increasing accessibility of the internet and mobile devices. With the proliferation of smartphones and affordable internet connectivity, more people have been able to join social media platforms and actively engage with content.

Moreover, the evolution of social media features, such as live streaming, augmented reality filters, and personalized content recommendations, has significantly contributed to the growing engagement on these platforms. These advancements have not only enhanced user experience but also provided new opportunities for businesses and content creators to reach and connect with their audience in more immersive and impactful ways.

Understanding the evolving growth rates and driving factors of social media platform adoption and engagement is crucial for businesses, marketers, and policymakers to align their strategies with the changing landscape of digital communication and consumer behavior.

### **Importance of understanding growth rates and user adoption**

Social media has changed the world. The rapid and vast adoption of these technologies is changing how we find partners, access information from the news, and organize to demand political change.

According to Merriam-Webster, social media is defined as “forms of electronic communication (such as websites for social networking and microblogging) through which users create online communities to share information, ideas, personal messages, and other content (such as videos).”

In less than a generation, social media has evolved from direct electronic information exchange, to virtual gathering place. In a sense, social media began on May 24, 1844, with a series of electronic dots and dashes tapped out by hand on a telegraph machine. The first electronic message from Baltimore to Washington, D.C., proved Samuel Morse understood the historic ramifications of his scientific achievement: “What hath God wrought?” he wrote.

In the 1980s and '90s, the internet's growth enabled the introduction of online communication services such as CompuServe, America Online, and Prodigy. They introduced users to digital communication through email, bulletin board messaging, and real-time online chatting. This gave rise to the earliest social media networks, beginning with the short-lived Six Degrees profile uploading service in 1997. This service was followed in 2001 by Friendster. These rudimentary platforms attracted millions of users and enabled email address registration and basic online networking. Weblogs, or blogs, another early form of digital social communication, began to gain popularity with the 1999 launch of the LiveJournal publishing site. This coincided with the launch of the Blogger publishing platform by the tech company Pyra Labs, which was purchased by Google in 2003.

In 2002, LinkedIn was founded as a networking site for career-minded professionals. By 2020, it had grown to more than 675 million users worldwide. It remains the social media site of choice for job seekers as well as human resources managers searching for qualified candidates.

In 2003, Myspace launched. By 2006, it was the most visited website on the planet, spurred by users' ability to share new music directly on their profile pages. By 2008, it was eclipsed by Facebook.

Today's social media landscape is populated by a suite of services that jockey for the attention of more than 5 billion mobile device users worldwide. Here is an overview of the most prominent social media networks of 2024:

## **II. Overview of Major Social Media Platforms**

### **LinkedIn**

LinkedIn is a business and employment-focused social media platform that works through websites and mobile apps. It was launched on May 5, 2003 by Reid Hoffman and Eric Ly. Since December 2016, LinkedIn has been a wholly owned subsidiary of Microsoft. The platform is primarily used for professional networking and career development, and allows jobseekers to post their CVs and employers to post jobs. From 2015, most of the company's revenue came from selling access to information about its members to recruiters and sales professionals. LinkedIn has more than 1 billion registered members from over 200 countries and territories.

LinkedIn allows members (both workers and employers) to create profiles and connect with each other in an online social network which may represent real-world professional relationships. Members can invite anyone (whether an existing member or not) to become a connection. LinkedIn can also be used to organize offline events, join groups, write articles, publish job postings, post photos and videos, and more.

### **Youtube**

YouTube is an American online video sharing platform owned by Google. Accessible worldwide, YouTube was launched on February 14, 2005, by Steve Chen, Chad Hurley, and Jawed Karim, three former employees of PayPal. Headquartered in San Bruno, California, United States, it is the second most visited website in the world, after Google Search. As of January 2024, YouTube has more than 2.7 billion monthly users, who collectively watch more than one billion hours of videos every day. As of May 2019, videos were being uploaded to the platform at a rate of more than 500 hours of content per minute, and as of 2021, there were approximately 14 billion videos in total.

In October 2006, YouTube was purchased by Google for \$1.65 billion (equivalent to \$2.31 billion in 2023). Google expanded YouTube's business model of generating revenue from advertisements alone, to offering paid content such as movies and exclusive content produced by and for YouTube. It also offers YouTube Premium, a paid subscription option for watching content without ads. YouTube incorporated Google's AdSense program, generating more revenue for both YouTube and approved content creators. In 2022, YouTube's annual advertising revenue increased to \$29.2 billion, more than \$9 billion higher than in 2020.

### **Facebook**

Facebook is a social networking service originally launched as TheFacebook on February 4, 2004, before changing its name to simply Facebook in August 2005. It was founded by Mark Zuckerberg, Eduardo Saverin, Andrew McCollum, Dustin Moskovitz, and Chris Hughes. The website's membership was initially limited by the founders to Harvard students, but was expanded to other colleges in the Boston area, the Ivy League, and gradually most universities in the United States and Canada, corporations, and by September 2006, to everyone with a valid email address along with an age requirement of being 13 or older.

In December 2005, it was reported that Facebook had 6 million monthly active users and in April 2023, Facebook had 2.989 billion monthly active users.

<b>Total Active Users</b>		
<b>Date</b>	<b>Users (in millions)</b>	<b>±% p.m.</b>
2004-02-04	0	-
2004-04-04	0.07	-
2004-07-04	0.1	-
2004-10-04	1.5	-
2008-08-26	100	-

2009-04-08	200	+9.83%
2009-09-15	300	+8.02%
2010-01-05	400	+8.13%
2010-07-21	500	+3.51%
2011-01-05	600	+3.36%
2011-05-30	700	+3.29%
2011-09-22	800	+3.60%
2012-04-24	900	+1.68%
2012-09-14	1,000	+2.27%
2013-03-31	1,110	+1.62%
2013-12-31	1,230	+1.14%
2014-12-31	1,390	+1.02%
2015-12-31	1,590	+1.13%
2016-12-31	1,860	+1.31%

## **Reddit**

Reddit is an American social news aggregation, content rating, and forum social network. Registered users (commonly referred to as "Redditors") submit content to the site such as links, text posts, images, and videos, which are then voted up or down by other members. Posts are organized by subject into user-created boards called "communities" or "subreddits". Submissions with more upvotes appear towards the top of their subreddit and, if they receive enough upvotes, ultimately on the site's front page.

Reddit was founded by University of Virginia roommates Steve Huffman and Alexis Ohanian, as well as Aaron Swartz, in 2005. Condé Nast Publications acquired the site in October 2006. In 2011, Reddit became an independent subsidiary of Condé Nast's parent company, Advance Publications.

According to Reddit, in 2019, there were approximately 430 million monthly users. As of October 2023, Reddit is the 18th most-visited website in the world. According to data provided by Similarweb, 48.98% of the website traffic comes from the United States, followed by the United Kingdom at 7.06% and Canada at 6.9%.

## **X (formerly "Twitter")**

X, commonly referred to by its former name Twitter, is a social networking service. It is one of the world's largest social media websites and the seventh-most visited website in the world. It was created in March 2006 by Jack Dorsey, Noah Glass, Biz Stone, and Evan Williams, and was launched in July of that year. Twitter, Inc., was based in San Francisco, California, and had more than 25 offices around the world. A signature characteristic of the service is that posts are required to be brief. Posts were initially limited to 140 characters, which was changed to 280 characters in 2017 and removed for paid accounts in 2023. Users can share short text messages, images, and videos in posts (formerly "tweets") and like or repost/retweet other users' content. X also includes direct messaging, video and audio calling, bookmarks, lists and communities, and Spaces, a social audio feature. Users can vote on context added by approved users using the Community Notes feature.

The service is owned by the American company X Corp., which was established to succeed the prior owner Twitter, Inc. in March 2023 following the October 2022 acquisition of Twitter by Elon Musk for US\$44 billion. Musk stated that his goal with the acquisition was to promote free speech on the platform. Since his acquisition, the platform has been criticized for enabling the increased spread of disinformation and hate speech.

Twitter grew quickly; by 2012 more than 100 million users produced 340 million tweets per day. A February 2009 Compete.com blog entry ranked Twitter as the third most used social network based on their count of 6 million unique monthly visitors and 55 million monthly visits. An April 2017 a statista.com blog entry ranked Twitter as the tenth most used social network based on their count of 319 million monthly visitors. Its global user base in 2017 was 328 million. According to Musk, X had 500 million monthly active users in March 2023, 550 million in March 2024, and 600 million in May 2024.

## **WhatsApp**

WhatsApp was founded in February 2009 by Brian Acton and Jan Koum. WhatsApp (officially WhatsApp Messenger) is an instant messaging (IM) and voice-over-IP (VoIP) service owned by technology conglomerate Meta. It allows users to send text, voice messages and video messages, make voice and video calls, and share images, documents, user locations, and other content. In January 2018, WhatsApp released a standalone business app called WhatsApp Business which can communicate with the standard WhatsApp client.

The service was created by WhatsApp Inc. of Mountain View, California, which was acquired by Facebook in February 2014 for approximately US\$19.3 billion. It became the world's most popular messaging application by 2015, and had more than 2 billion users worldwide by February 2020, confirmed four years later by new 200M registrations per month. By 2016, it had become the primary means of Internet communication in regions including Latin America, the Indian subcontinent, and large parts of Europe and Africa.

## **Instagram**

Instagram is a photo and video sharing social networking service owned by Meta Platforms. It allows users to upload media that can be edited with filters, be organized by hashtags, and be associated with a location via geographical tagging. Posts can be shared publicly or with preapproved followers. Users can browse other users' content by tags and locations, view trending content, like photos, and follow other users to add their content to a personal feed. Users can take photos and edit them using built-in filters and other tools, then share them on other social media platforms like Facebook.

Originally launched for iOS in October 2010 by Kevin Systrom and Mike Krieger, Instagram rapidly gained popularity, with one million registered users in two months, 10 million in a year, and 1 billion by June 2018. In April 2012, Facebook Inc. acquired the service for approximately US\$1 billion in cash and stock. As of October 2015, over 40 billion photos had been uploaded. Although often admired for its success and influence, Instagram has also been criticized for negatively affecting teens' mental health, its policy and interface changes, its alleged censorship, and illegal and inappropriate content uploaded by users.

Table: Countries with most Users (April 2023)

Rank	Country	Users
1	India	326.6 million
2	United States	168.6 million
3	Brazil	132.6 million
4	Indonesia	106.0 million
5	Turkey	56.4 million
6	Japan	54.7 million
7	Mexico	43.8 million
8	Germany	33.8 million
9	United Kingdom	33.5 million
10	Italy	30.3 million

## **Pinterest**

Pinterest is an American image sharing and social media service designed to enable saving and discovery of information (specifically "ideas") like recipes, home, style, motivation, and inspiration on the internet using images and, on a smaller scale, animated GIFs and videos, in the form of pinboards. Created by Ben Silbermann, Paul Sciarra, and Evan Sharp, and launched in 2010, Pinterest, Inc. is headquartered in San Francisco.

Pinterest is a free website that requires registration to use. In February 2013, Reuters and ComScore stated that Pinterest had 48.7 million users globally, and a study released in July 2013 by French social media agency SemioCast revealed the website had 70 million users worldwide. In October 2016, the company had 150 million monthly active users (70 million in the U.S. and 80 million outside it), rising to 175 million monthly active users by April 2017 and 250 million in September 2018. As of July 2020, there were over 400 million monthly active users. In April 2023, Pinterest reported 463 million monthly active users, which suggests that 7.4% of the world's population over age 13 use Pinterest.

## Snapchat

Snapchat is an American multimedia instant messaging app and service developed by Snap Inc., originally Snapchat Inc. One of the principal features of Snapchat is that pictures and messages are usually only available for a short time before they become inaccessible to their recipients. The app has evolved from originally focusing on person-to-person photo sharing to presently featuring users' "Stories" of 24 hours of chronological content, along with "Discover", letting brands show ad-supported short-form content. It also allows users to store photos in a password-protected area called "My Eyes Only". It has also reportedly incorporated limited use of end-to-end encryption, with plans to broaden its use in the future.

Snapchat was created by Evan Spiegel, Bobby Murphy, and Reggie Brown, former students at Stanford University in 2011. It is known for representing a mobile-first direction for social media, and places significant emphasis on users interacting with virtual stickers and augmented reality objects. In July 2021, Snapchat had 293 million daily active users, a 23% growth over a year. On average more than four billion Snaps are sent each day. Snapchat is popular among the younger generations, particularly those below the age of 16, leading to many privacy concerns for parents.

## TikTok

TikTok is a short-form video hosting service owned by Chinese internet company ByteDance. It hosts user-submitted videos, which can range in duration from three seconds to 60 minutes. It can be accessed with a smartphone app.

Since its launch in 2016, TikTok has become one of the world's most popular social media platforms, using recommendation algorithms to connect content creators with new audiences. Many of its users are young and part of Generation Z. In April 2020, TikTok surpassed two billion mobile downloads worldwide. Cloudflare ranked TikTok the most popular website of 2021, surpassing Google. The popularity of TikTok has allowed viral trends in food and music to take off and increase the platform's cultural impact worldwide.

As of the first quarter of 2022, there were over 100 million monthly active users in the United States and 23 million in the UK. The average user, daily, was spending 1 hour and 25 minutes on the app and opening TikTok 17 times. Out of TikTok's top 100 male creators, a 2022 analysis reported 67% were white, with 54% having near-perfect facial symmetry.

TikTok has come under scrutiny due to data privacy violations, mental health concerns, misinformation, offensive content, and its role during the Israel– Hamas war. Countries have fined, banned, or attempted to restrict TikTok to protect children or out of national security concerns over possible user data collection by the Chinese government through ByteDance.

Platform	Description	Founders	Launch Date	Ownership	Users
LinkedIn	Business and employment-focused social media platform	Reid Hoffman, Eric Ly	May 5, 2003	Microsoft (since December 2016)	1 billion+ from 200+ countries
YouTube	Online video sharing platform	Steve Chen, Chad Hurley, Jawed Karim	February 14, 2005	Google (since October 2006)	2.7 billion monthly users
Facebook	Social networking service	Mark Zuckerberg, Eduardo Saverin, Andrew McCollum, Dustin Moskovitz, Chris Hughes	February 4, 2004	Meta Platforms	2.989 billion monthly active users
Reddit	Social news aggregation, content rating, forum social network	Steve Huffman, Alexis Ohanian, Aaron Swartz	June 23, 2005	Advance Publications (since 2011)	430 million monthly users (2019)
X (formerly Twitter)	Social networking service	Jack Dorsey, Noah Glass, Biz Stone, Evan Williams	July 15, 2006	X Corp. (owned by Elon Musk since October 2022)	600 million monthly active users (May 2024)
WhatsApp	Instant messaging and voice-over-IP service	Brian Acton, Jan Koum	January 2009	Meta Platforms (since February 2014)	2 billion+ users
Instagram	Photo and video sharing social networking service	Kevin Systrom, Mike Krieger	October 6, 2010	Meta Platforms (since April 2012)	1 billion+ users

Pinterest	Image sharing and social media service	Ben Silbermann, Paul Sciarra, Evan Sharp	December 2010	Publicly traded	463 million monthly active users
Snapchat	Multimedia instant messaging app	Evan Spiegel, Bobby Murphy, Reggie Brown	September 2011	Snap Inc.	293 million daily active users (July 2021)
TikTok	Short-form video hosting service	ByteDance	September 2016	ByteDance	1 billion+ users

## Historical Growth Rates

### Data and metrics for measuring growth

#### 1. DAU, WAU, and MAU

DAU, WAU, MAU stand for Daily, Weekly, and Monthly Active Users, that is the unique number of users who are "active" within a given amount of time. These metrics have been used for years by websites and reflect the most basic way of measuring user engagement.

#### 2. Stickiness, The DAU/MAU Ratio

Stickiness is generally calculated as the ratio of Daily Active Users to Monthly Active Users. A DAU/MAU ratio of 50% would mean that the average user of our app is using it 15 out of 30 days that month.

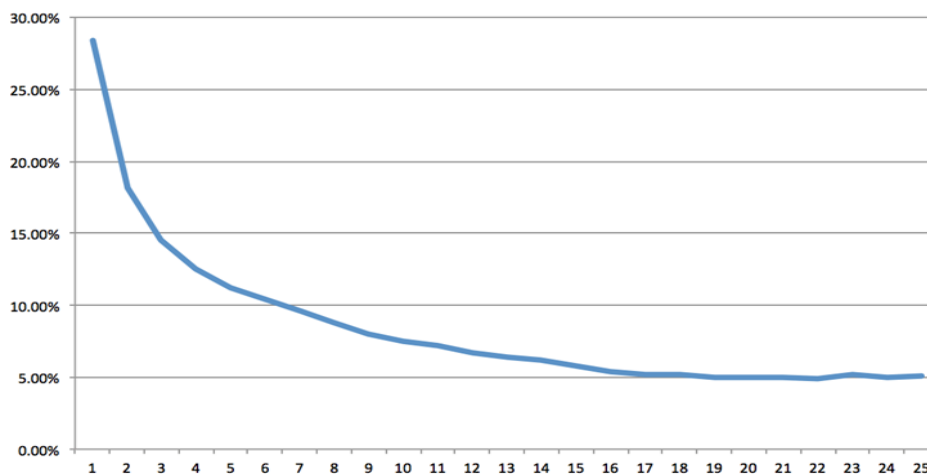
When an app is referred to as "sticky," it means that its users find it valuable and return to it regularly.

#### 3. D1, D7, D30 User Retention

D1, D7 and D30 retentions are calculated as the percentage of users who are active at any time after 1 day, 7 days and 30 days of signing up or installing our app.

The most useful way to model this data through a **Retention Curve**.

Take a look at the sample Retention Curve shown below. This curve shows the percent of users that remain active after a period of time.



[Image: <https://blog.popcornmetrics.com/content/images/2017/01/30-day-user-retention-curve-example-min.png>]

The retention curve has two key features:

- (i) it tends to drop off really fast at the start (more later on this)
- (ii) the curve then (hopefully) tends to flatten out over time. If instead of flattening it hits zero, it's a strong signal to urgently need to improve user engagement.

This is an incredibly useful way to measure user engagement, and the aim over time is to move the curve upwards by working to improve user engagement, both at the start when new user's signup, as well as over time.

#### 4. Session length

Session length refers to the amount of time that a user spends visiting a website, or inside an app.

#### 5. Session intervals

Session intervals refer to the amount of time that passes between visits to a website or app.

## 6. Retention rate

Retention rate is the percentage of customers who continue to use a product or service over time.

## 7. Conversion rate

Conversion rate is defined as the percentage of prospective or active users who complete a desired action. Within the sphere of eCommerce, conversion most often refers to purchases, but it can also mean email signups, social shares, or loyalty program participation, depending on the goals of the campaign.

## 8. User engagement rate

The user engagement rate refers to the percentage of total users who are engaged with a brand, i.e. participating in the social conversation, making purchases and referrals, or interacting with content.

To calculate user engagement, Divide the number of engaged users (those who interact with your content) by the total users during that period, then multiply by 100 to get the percentage.

## 9. Churn rate

Churn rate refers to the percentage of customers, users, or subscribers who disengage from an app or brand over a certain amount of time.

## 10. Click-through rate (CTR)

A click-through rate is the percentage of visitors who click through an ad or message to access more information or make a purchase.

## 11. Time on page

The time on page metric measures the amount of time spent on a specific web page. This can be an especially important engagement metric for content sites since it can often indicate how many visitors are consuming a content piece in its entirety. Longer page times don't always indicate higher engagement though- sometimes users stall on a page due to confusion, indecision, or abandonment.

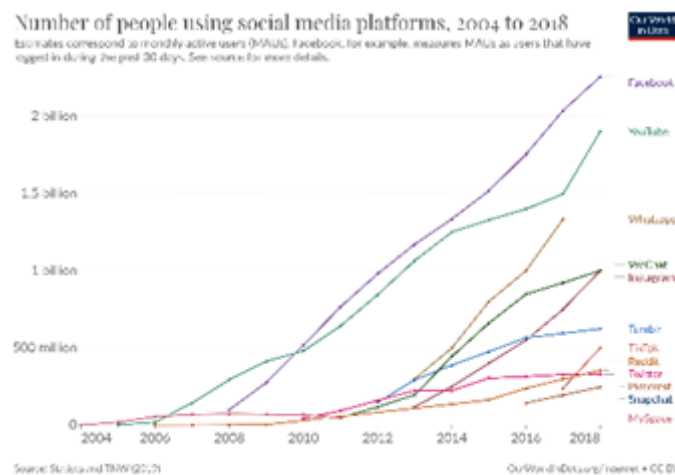
## 12. Returning visitor rate

The returning visitor rate is the percentage of website visitors who have been to the site before and can often indicate brand investment or valued content.

## 13. Page-per-visit

The page-per-visit metric measures the average of how many pages of a website are visited per session.

## Comparative Analysis of Social Media Platforms



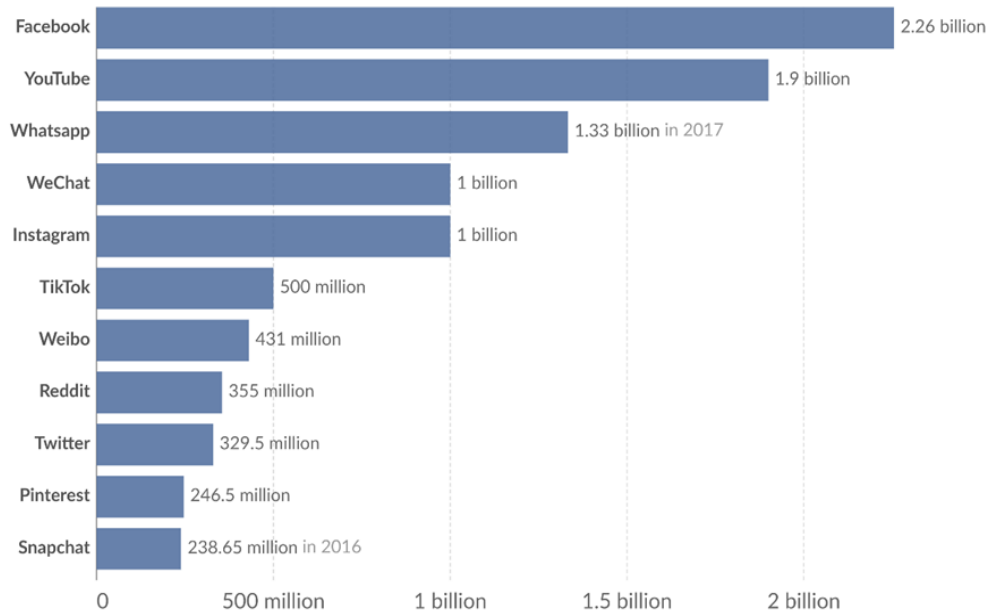
[Image: [https://ourworldindata.org/images/published/social-media-users-over-time\\_1350.png](https://ourworldindata.org/images/published/social-media-users-over-time_1350.png)  
Monthly active users across various platforms since 2004.]

With 2.3 billion users, Facebook was the most popular social media platform in 2019. YouTube, Instagram, and WeChat followed, with over a billion users. Tumblr and TikTok came next, with over half a billion users.

## Number of people using social media platforms, 2018



Estimates correspond to monthly active users (MAUs). Facebook, for example, measures MAUs as users that have logged in during the past 30 days. See source for more details.



Source: Statista and TNW (2019)

OurWorldInData.org/internet • CC BY

[Image: [https://ourworldindata.org/images/published/social-media-users-by-platform\\_1350.png](https://ourworldindata.org/images/published/social-media-users-by-platform_1350.png)]

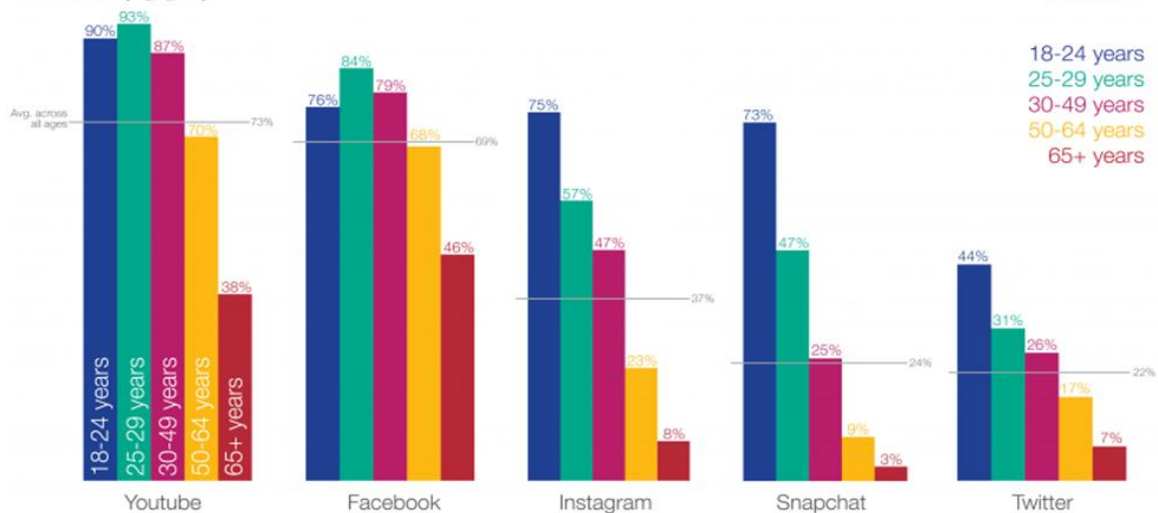
Bar chart shows that Facebook is the most popular, followed by YouTube and Whatsapp.

Some social media sites are much more popular than others among specific population groups. In general, young people are more likely to use social media than older people. But some platforms are much more popular among younger people. This is shown in the chart where we plot the breakdown of social media use by age group in the US.

## Use of social media platforms by age group in the US



The share of adults in the United States who say they ever use the following online platforms or social media apps in 2019. This is shown by age group.



Data source: Pew Research Center (2019)

This is a visualization from OurWorldInData.org, where you find data and research to make progress against the world's largest problems.

Licensed under CC-BY by the author Esteban Ortiz-Ospina.

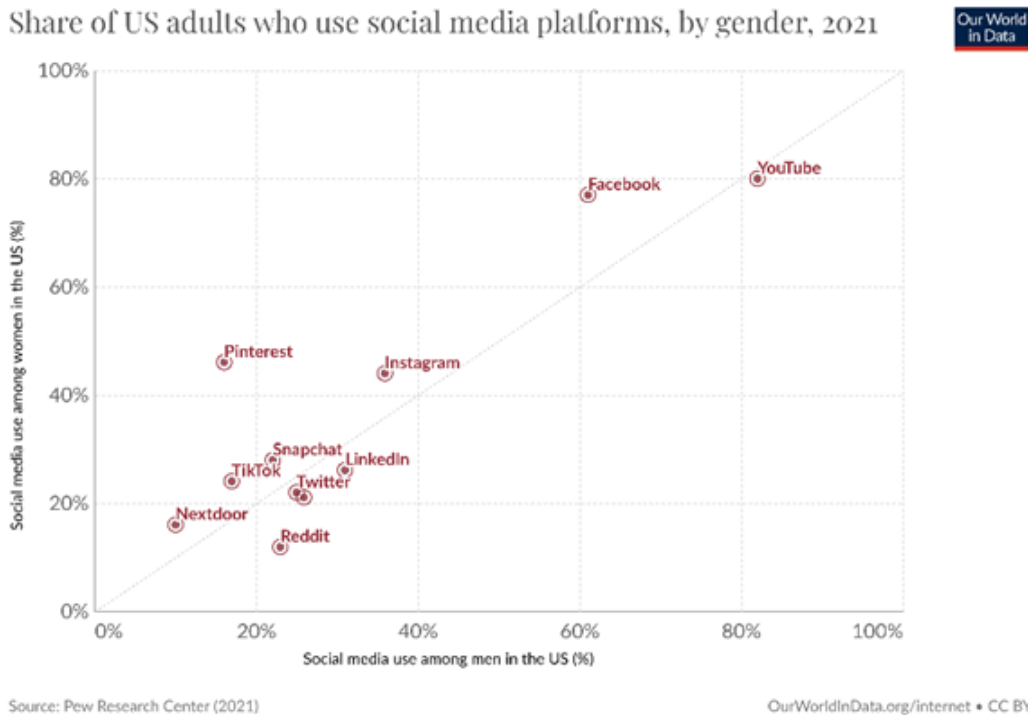
[Image: [https://ourworldindata.org/images/published/Use-of-social-media-by-age\\_800.png](https://ourworldindata.org/images/published/Use-of-social-media-by-age_800.png)]

For Snapchat and Instagram, the 'age gradient' is exceptionally steep – the popularity of these platforms drops much faster with age. Most people under 25 use Snapchat (73%), while only 3% of people over 65 use it. Since



these platforms are relatively new, it's hard to know how much of this age gradient results from a "cohort effect". In other words: it's unclear whether today's young people will continue using Snapchat as they age. If they do, the age gradient will narrow.

Let's now look at gender differences.



[Image: [https://ourworldindata.org/images/published/adults-using-social-media-by-gender\\_1350.png](https://ourworldindata.org/images/published/adults-using-social-media-by-gender_1350.png)]

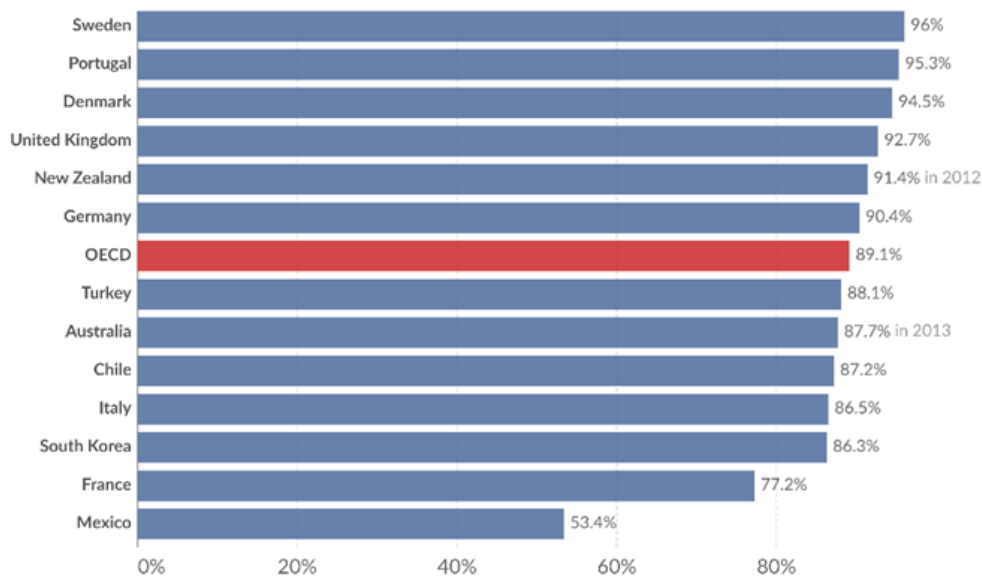
This chart shows the percentage of men and women that used different platforms in the US in 2021—the diagonal line marks parity. Sites above the diagonal line are more popular among women, and those below are more popular among men. For some platforms, the gender differences are substantial. The share of women who used Pinterest was 3 times as high as that of men using this platform. For Reddit, it was the other way around: the share of men was twice as high. Scatterplot of the share of US adults using social media platforms, by gender showing that there is can be large differences depending on the platform.

Young people tend to use social media more frequently. In fact, in rich countries where access to the Internet is nearly universal, the vast majority of young adults use it. The below chart shows the proportion of people aged 16 to 24 who used social networks across various countries. As we can see, the average for the OECD is close to 90%.

If today's young adults continue using social media throughout their lives, then it's likely that social media will continue growing rapidly as Internet adoption expands throughout lower-income countries.

### Percentage of young people engaging in social networking online, 2014

Percentage of young people, aged 16-24, engaging in social networking online. The OECD average is unweighted. Data refer to 2014 or closest available estimate.



Source: OECD Society at a Glance (2019)

OurWorldInData.org/internet • CC BY

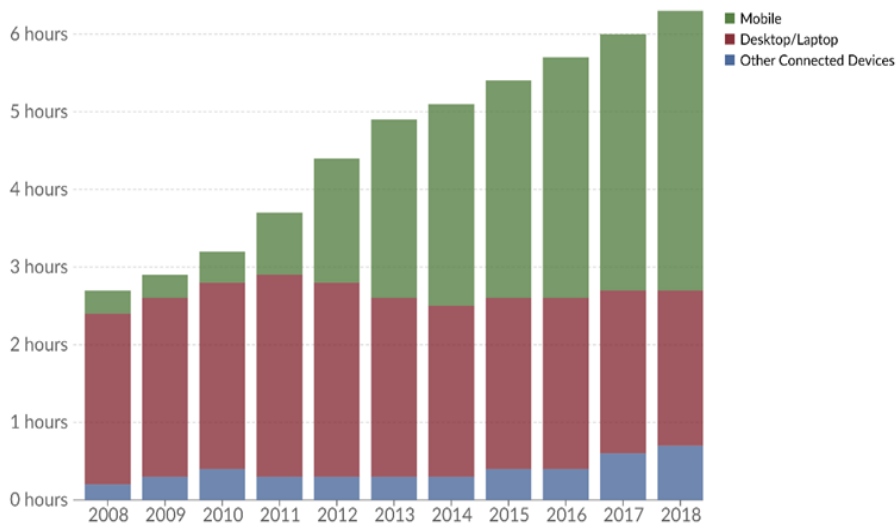
[Image: [https://ourworldindata.org/images/published/share-of-young-people-networking-online\\_1350.png](https://ourworldindata.org/images/published/share-of-young-people-networking-online_1350.png)]

The increase in social media use over the last decade has come together with a large increase in the amount of time people spend online.

In the US, adults spend more than 6 hours daily on digital media (apps and websites accessed through mobile phones, tablets, computers, and other connected devices such as game consoles). As the chart shows, this growth has been driven almost entirely by additional time spent on smartphones and tablets.

### Daily hours spent with digital media, United States, 2008 to 2018

Average hours per day spent engaging with digital media (e.g. digital images and videos, web pages, social media apps, etc.) The data for 'other connected devices' includes game consoles. Mobile includes smartphones & tablets. All data includes both home & work usage for people 18+.



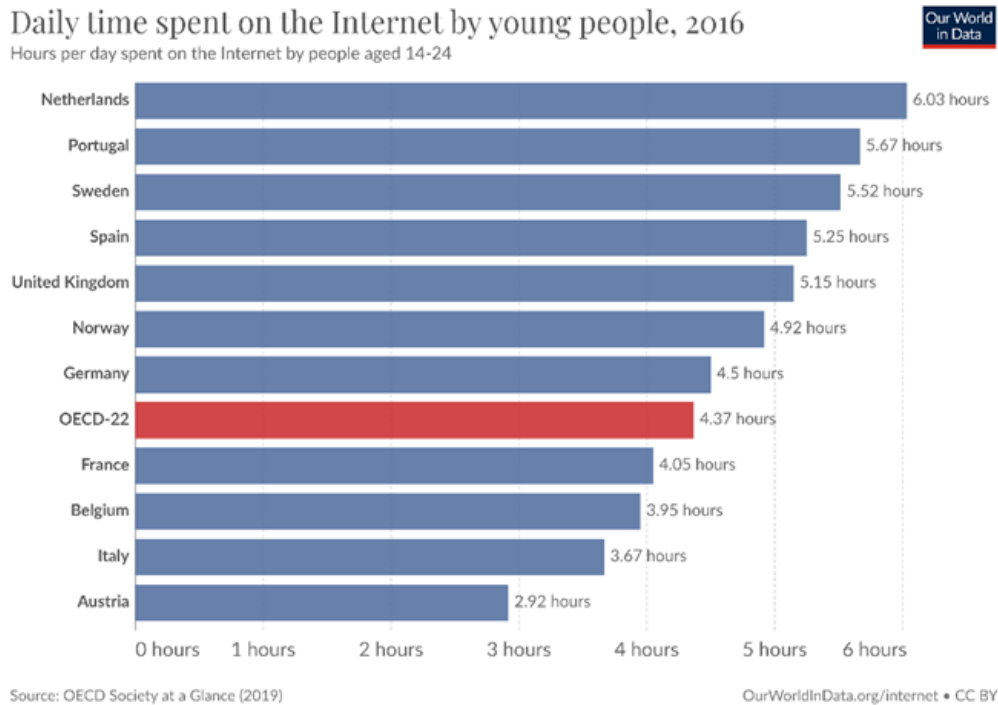
Source: BOND Internet Trends (2019)

OurWorldInData.org/internet • CC BY

[Image: [https://ourworldindata.org/images/published/daily-hours-spent-with-digital-media-per-adult-user\\_1350.png](https://ourworldindata.org/images/published/daily-hours-spent-with-digital-media-per-adult-user_1350.png)]

According to a survey from the Pew Research Center, adults aged 18 to 29 in the US are more likely to get news indirectly via social media than directly from print newspapers or news sites. They also report being online “almost constantly”.

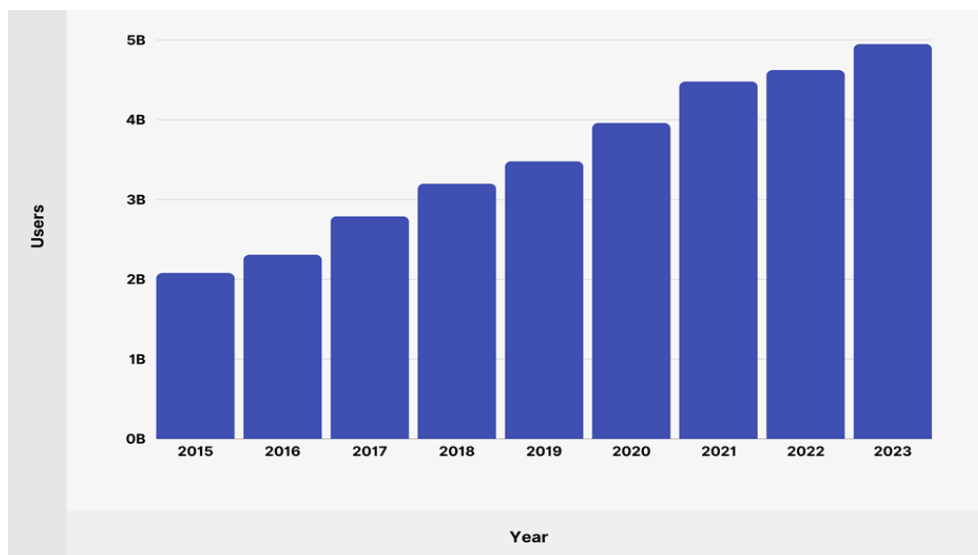
Evidence shows that in other rich countries, people also spend many hours per day online. The following chart shows how many hours young people spend online across various rich countries. As we can see, the average for the OECD is more than 4 hours per day; in some countries, the average is above 6 hours per day.



[Image: [https://ourworldindata.org/images/published/daily-time-online-by-young-people\\_1350.png](https://ourworldindata.org/images/published/daily-time-online-by-young-people_1350.png)]

### Identification of key growth periods and milestones

In 2023, there are **4.95 billion** people actively using social media in the world, and this is an increase of **7.07%** year-on-year from 4.62 billion in 2022.



[Image: <https://api.backlinko.com/app/uploads/2023/12/social-network-growth-768x584.webp>]

Back in 2015, there were only 2.08 billion users – that’s an overall increase in users of 138.2% in just eight years.

#### **8 Year Social Media Growth Statistics:**

- **2023:** 4.950 billion active users (+7.07%)
- **2022:** 4.623 billion active users (+3.19%)
- **2021:** 4.480 billion active users (+13.13%)
- **2020:** 3.960 billion active users (+13.7%)
- **2019:** 3.484 billion active users (+9.2%)
- **2018:** 3.196 billion active users (+9.0%)
- **2017:** 2.796 billion active users (+21%)
- **2016:** 2.307 billion active users (+11%)
- **2015:** 2.078 billion active users

#### **Key Factors Influencing Growth Periods:**

1. **Technological Advancements:** The advent of smartphones and mobile internet significantly boosted social media usage, especially in the mobile era.
2. **Cultural Shifts:** Changing social behaviors, such as the desire for instant communication and sharing, fueled the adoption of various platforms.
3. **Platform Innovations:** Introduction of new features like news feeds, Stories, and video content kept users engaged and attracted new users.
4. **Market Dynamics:** Strategic acquisitions (e.g., Facebook acquiring Instagram and WhatsApp) and competition among platforms spurred growth and innovation.

#### **Economic Factors Influencing User Engagement**

Economic factors play a crucial role in shaping user engagement on social media platforms. Here’s a detailed look at some of these factors:

##### **1. Cost of Use**

• **Monetary Costs:** While many social media platforms are free to use, there may be hidden costs such as data usage fees, premium subscriptions, or advertising expenditures.

• **Opportunity Costs:** Time spent on social media could be used for other activities, such as work or personal development. Users weigh the benefits of engagement against these opportunity costs.

These can be evaluated by doing Cost-benefit Analysis, Cost-benefit analysis is a fundamental concept in economics where individuals assess the trade-offs involved in any decision. Social media platforms strive to tip this balance in favor of benefits to attract and retain users.

Users weigh the costs (e.g., time, privacy concerns, potential negative interactions) against the benefits (e.g., social connections, entertainment, information) before deciding to use a platform. Platforms that minimize perceived costs (e.g., through user-friendly interfaces, robust privacy settings) and maximize benefits tend to see higher adoption and engagement.

##### **2. Income Levels**

• **Affordability of Technology:** Higher-income users are more likely to afford advanced smartphones, data plans, and other technologies, enabling greater and more frequent engagement with social media.

• **Spending on Digital Content:** Higher income can also correlate with spending on premium content, subscriptions, and digital goods within social media ecosystems.

As we’ve discussed earlier, in rich countries, people spend many hours per day online.

##### **3. Economic Stability and Disposable Income**

• **Economic Uncertainty:** In times of economic downturn or instability, users may reduce their discretionary spending, including on digital entertainment and social media subscriptions.

• **Disposable Income:** Higher disposable income allows users to engage more with paid features or premium content, enhancing their social media experience.

##### **4. Advertising Economics**

• **Ad Spend and Revenue Models:** The effectiveness of advertising on social media depends on user engagement. Higher engagement rates can lead to increased advertising revenue, influencing platforms to enhance features that boost user interaction.

• **Targeted Advertising:** Platforms use data analytics to target users with personalized ads, increasing the likelihood of user engagement with advertisements, thus driving platform revenue.

## **5. Market Competition**

The competition among social media platforms influences pricing strategies, user incentives, and service offerings, affecting user retention and engagement.

Platforms that innovate with new features, better user experience, and unique content are more likely to attract and retain users, enhancing engagement. This is known as “differentiation of products”.

Social media platforms compete by differentiating their offerings to attract specific user segments. For example, LinkedIn focuses on professional networking, while Snapchat targets a younger demographic with ephemeral content. Social media platforms continuously innovate and differentiate to attract and retain users in a competitive market.

## **6. Technology and Infrastructure**

High-speed internet and widespread connectivity are essential for seamless social media use. Regions with better infrastructure see higher user engagement.

The availability and affordability of smartphones significantly impact user engagement, with higher penetration rates correlating with increased social media activity.

## **7. Labor Market Dynamics**

The rise in remote work can increase social media engagement as people seek digital social interactions during work breaks or leisure time.

Users with higher digital literacy and skills are more likely to engage with and utilize advanced features on social media platforms.

## **8. Economic Incentives and Rewards**

Programs offering monetary rewards, such as influencer marketing or affiliate schemes, can boost user engagement by providing financial incentives.

Incorporating game-like elements such as points, badges, and leaderboards can enhance user engagement by making interactions more rewarding.

## **9. Network Effects (Metcalfe's Law) & Switching Costs**

The value of a social media platform increases with the number of users. As more people join, the platform becomes more valuable because users have more connections and potential interactions. This can be seen in the popularity of platforms like Facebook and Instagram, where the extensive user base is a major attraction.

These occur when the increase in users attracts more developers and businesses to create content, applications, or services for the platform, further enhancing its value. For example, the large user base on YouTube attracts more content creators, improving the overall content quality and variety.

Network effects create a positive feedback loop that accelerates user adoption. According to Metcalfe's Law, the value of a network grows proportionally to the square of the number of its users.

Once users invest time and effort in building their social networks and content on a platform, switching to a new platform entails significant costs. This lock-in effect keeps users engaged on the existing platform. Switching costs refer to the economic barriers that prevent consumers from changing providers. High switching costs result in greater user retention as users prefer to stay on a familiar platform rather than incurring the costs associated with switching.

## **10. Utility Maximization**

Users join and engage with social media platforms to maximize their utility. Utility in this context can be derived from various sources such as entertainment, information, social connections, or professional networking. Different platforms cater to different types of utility (e.g., LinkedIn for professional networking, TikTok for entertainment). Based on the theory of utility maximization, individuals make choices that provide them with the highest level of satisfaction. Social media platforms design their features and algorithms to maximize user engagement by delivering content that aligns with users' preferences and interests.

## **11. Behavioral Economics and Nudging**

Social media platforms use insights from behavioral economics to nudge users towards increased engagement. Techniques such as infinite scroll, notifications, and personalized content feed exploit cognitive biases and heuristics to keep users engaged.

By understanding and leveraging cognitive biases (e.g., loss aversion, confirmation bias), platforms can design features that subtly encourage more frequent and prolonged use.

## **12. Externalities**

Positive externalities occur when the presence of users on a platform benefits other (e.g., friends and family can stay connected). Negative externalities can include issues like information overload or cyberbullying, which platforms need to manage to maintain user engagement. Platforms aim to enhance positive externalities and mitigate negative ones to sustain user growth and engagement.

## **III. Conclusion**

### **Saturation and competition in the social media market**

The social media market is experiencing a phase of saturation and intense competition. With established platforms like Facebook, Instagram, and Twitter reaching user base plateaus, the challenge now lies in maintaining user engagement amidst an overload of content. The emergence of niche platforms such as TikTok has intensified competition, as new entrants attract specific demographics with unique features. Additionally, the fight for advertising revenue is fierce, compelling platforms to innovate continually while also mimicking successful features from their competitors.

### **Privacy concerns and regulatory challenges**

Privacy concerns and regulatory challenges are significantly shaping the landscape of social media. High-profile data breaches and the pervasive collection of personal data have eroded user trust, prompting stricter data protection regulations like GDPR in Europe and CCPA in California. These regulations impose rigorous requirements on data handling and user consent, challenging platforms to adapt. Furthermore, social media giants face antitrust scrutiny and content moderation laws, demanding greater accountability and compliance, thus adding layers of complexity to their operations.

### **Emerging technologies**

Emerging technologies such as virtual reality (VR) and artificial intelligence (AI) are set to redefine social media experiences. VR aims to create immersive social environments, with platforms like Facebook's Horizon Worlds leading the charge, although widespread adoption is still nascent. AI, on the other hand, is already revolutionizing content recommendation, user interaction, and customer service through chatbots, while also posing new challenges in verifying content authenticity due to the rise of deepfakes. These technological advancements promise to enhance user experiences but also require robust ethical and practical frameworks to manage their impact.

### **Shifts in user preferences and behavior**

Shifts in user preferences and behavior further complicate the social media ecosystem. The popularity of short-form video content, exemplified by TikTok, and the rise of ephemeral content like Instagram Stories reflect a significant change in how users consume and share information. Users, particularly younger demographics, are migrating to platforms that better align with their evolving preferences for more dynamic and transient interactions. Additionally, there is a growing trend towards interest-based communities and a demand for authenticity and transparency, driving changes in content creation and engagement strategies.

In conclusion, the social media landscape is undergoing transformative changes driven by market saturation, privacy and regulatory challenges, emerging technologies, and shifts in user behavior. Platforms must navigate these dynamics to remain relevant and competitive, balancing innovation with user trust and regulatory compliance. As social media continues to evolve, the interplay of these factors will determine the future trajectory of digital social interactions.

## **References**

- [1]. Boyce, P. (2019, October 12). 5 User Engagement Metrics: What are DAU, WAU, MAU ratios, and D1, D30? Marketing Analytics Blog for Growth Hackers | Popcorn Metrics ; Marketing Analytics Blog for Growth Hackers | Popcorn Metrics . <https://blog.popcornmetrics.com/5-user-engagement-metrics-for-growth/>
- [2]. Contributors to Wikimedia projects. (2004, September 9). LinkedIn - Wikipedia. Wikipedia, the Free Encyclopedia; Wikimedia Foundation, Inc. <https://en.wikipedia.org/wiki/LinkedIn#History>
- [3]. Contributors to Wikimedia projects. (2005, December 25). YouTube - Wikipedia. Wikipedia, the Free Encyclopedia; Wikimedia Foundation, Inc. <https://en.wikipedia.org/wiki/YouTube>
- [4]. Contributors to Wikimedia projects. (2006, January 24). Reddit - Wikipedia. Wikipedia, the Free Encyclopedia; Wikimedia Foundation, Inc. <https://en.wikipedia.org/wiki/Reddit>
- [5]. Contributors to Wikimedia projects. (2007, February 12). Twitter - Wikipedia. Wikipedia, the Free Encyclopedia; Wikimedia Foundation, Inc. <https://en.wikipedia.org/wiki/Twitter>

- [6]. Contributors to Wikimedia projects. (2010, July 6). History of Facebook - Wikipedia. Wikipedia, the Free Encyclopedia; Wikimedia Foundation, Inc. [https://en.wikipedia.org/wiki/History\\_of\\_Facebook#Timeline](https://en.wikipedia.org/wiki/History_of_Facebook#Timeline)
- [7]. Contributors to Wikimedia projects. (2011a, April 25). Instagram - Wikipedia. Wikipedia, the Free Encyclopedia; Wikimedia Foundation, Inc. <https://en.wikipedia.org/wiki/Instagram#>
- [8]. Contributors to Wikimedia projects. (2011b, June 12). WhatsApp - Wikipedia. Wikipedia, the Free Encyclopedia; Wikimedia Foundation, Inc. <https://en.wikipedia.org/wiki/WhatsApp>
- [9]. Contributors to Wikimedia projects. (2011c, August 22). Pinterest - Wikipedia. Wikipedia, the Free Encyclopedia; Wikimedia Foundation, Inc. <https://en.wikipedia.org/wiki/Pinterest>
- [10]. Contributors to Wikimedia projects. (2012, October 31). Snapchat - Wikipedia. Wikipedia, the Free Encyclopedia; Wikimedia Foundation, Inc. <https://en.wikipedia.org/wiki/Snapchat>
- [11]. Contributors to Wikimedia projects. (2018, March 2). TikTok - Wikipedia. Wikipedia, the Free Encyclopedia; Wikimedia Foundation, Inc. <https://en.wikipedia.org/wiki/TikTok#Usage>
- [12]. Ospina, E. O. (2019, September 18). The rise of social media - Our World in Data. Our World in Data. <https://ourworldindata.org/rise-of-social-media>
- [13]. Social Network Usage & Growth Statistics: How Many People Use Social Media in 2024? (2023, December 19). Backlinko; <https://www.facebook.com/Backlinko>. <https://backlinko.com/social-media-users#global-social-media-growth-rates>
- [14]. Storyly, T. (2024, June 20). What is User Engagement? How to Measure It? - Storyly. Storyly: Personalized, Interactive, Shoppable Content Experiences. <https://www.storyly.io/glossary/user-engagement>
- [15]. Wordpress, 2U. (2020, May 28). The Evolution of Social Media: How Did It Begin, and Where Could It Go Next? | Maryville Online. Maryville University Online. <https://online.maryville.edu/blog/evolution-social-media/>