
6. Social Media Analytics Applications and Privacy

Contents

- Social media in public sector - Analyzing public sector social media,analyzing individual users, case study.
- Business use of Social Media - Measuring success, Interaction and monitoring, case study.
- Privacy - Privacy policies,data ownership and maintaining privacy online.

Traditional Media Vs Social Media

1. **Reach:** Traditional media (such as television, radio, and print) often have a wider reach compared to social media, as they can be accessed by people without internet access. Social media, on the other hand, is limited to those who are connected to the internet.
2. **Cost:** Traditional media can be expensive to advertise on, as it requires purchasing airtime or ad space. Social media advertising can be more cost-effective, as it allows for targeting specific groups and allows for adjusting campaigns based on performance.

Traditional Media Vs Social Media

3. Control: Traditional media allows for more control over the message being delivered, as it is a one-way communication. Social media allows for less control, as it is a two-way communication and allows for audience interaction and the spread of information beyond the intended audience.

4. Speed: Traditional media often has a slower turnaround time for creating and distributing content, as it requires production and distribution processes. Social media allows for faster dissemination of information, as it can be shared instantly.

5. Engagement: Social media allows for more engagement with the audience, as it allows for two-way communication and the ability to respond to comments and feedback. Traditional media has a lower level of engagement, as it is a one-way communication.

- You name it and you get it over Social media !!!

Box: Examples of Social Media Sites⁹

Craigslist—classified ads. Available: www.craigslist.org/about/sites

Delicious—social bookmarking. Available: delicious

Digg—social news. Available: www.digg.com

Engadget—gadget news and reviews. Available: www.engadget.com/

Facebook—social networking. Available: www.facebook.com

Flickr—photo sharing. Available: www.flickr.com

Flixster—movie reviews and ratings. Available: www.flixster.com/

LinkedIn—professional networking. Available: www.linkedin.com

MyBlogLog—blog networking. Available: www.mybloglog.com

MySpace Music—music sharing. Available: www.myspace.com/

Netvibes—information aggregator. Available: www.netvibes.com/#general

Ning—social network space. Available: www.ning.com/

NutshellMail—social network aggregation. Available: nutshellmail.com/

Second Life—virtual worlds. Available: secondlife.com

Slideshare—presentation sharing. Available: www.slideshare.net/

Twitter—microblogging. Available: twitter.com/

Wikipedia—web-based encyclopedia. Available: wikipedia.org

WordPress—open source blog publishing application. Available: wordpress.org/

Yahoo! Answers—community answers. Available: answers.yahoo.com

YouTube—video sharing. Available: www.youtube.com

Social Media in Public Sector

- Social media is revolutionizing the way we live, learn, work and play.
- Social media has changed the way information is distributed in the public. At present, it is the most influential platform that everyone can use freely to inform and to engage.
- The sector aims to provide the public with updates and latest information on the government, the industries under it, policy updates and objectives, and an open platform that the general public can reach to, whenever needed.

Social Media in Politics :

SECOND MOST FOLLOWED POLITICIAN GLOBALLY

Modi is the second most followed political leader globally across social media platforms (Twitter, Instagram and Facebook), behind only Barack Obama but ahead of Donald Trump

OBAMA Twitter 113.3m

Instagram 26.9m

Facebook 55m

Total
195.2m

MODI Twitter 53.3m

Instagram 35.2m

Facebook 44.7m

Total
133.2m

TRUMP Twitter 73.2m

Instagram 17.9m

Facebook 26m

Total
117.1m

Source: Social media platforms



MODI IS THE MOST POPULAR INDIAN ON TWITTER



Source: Twitter

- This is how India's two major political parties used social networking sites to bypass the mainstream media and speak directly to voters in 2019



Social Media in Politics :

- The Social media helps building mutual communication between common people and Government bodies.
- Political campaigns aren't simply confined to buttons and banners for politicians to achieve their voters. The new political showground is choked with infomercials, advertisements, weblog posts, and lakhs of tweets, Instagram posts, Facebook posts and so forth.
- In 10 of the 11 surveyed, there are people who believe technology has made people more informed
- From 2014 onward, many start-ups related to social media came into the picture. Due to this various job opportunities got opened for the younger generation.
- **Biden #BuildBackBetter**
46th President of the United States, Joe Biden, used social media to gain leverage and grow momentum for his [Build Back Better](#) campaign throughout 2020 and 2021.

Social Media in Film Industry :

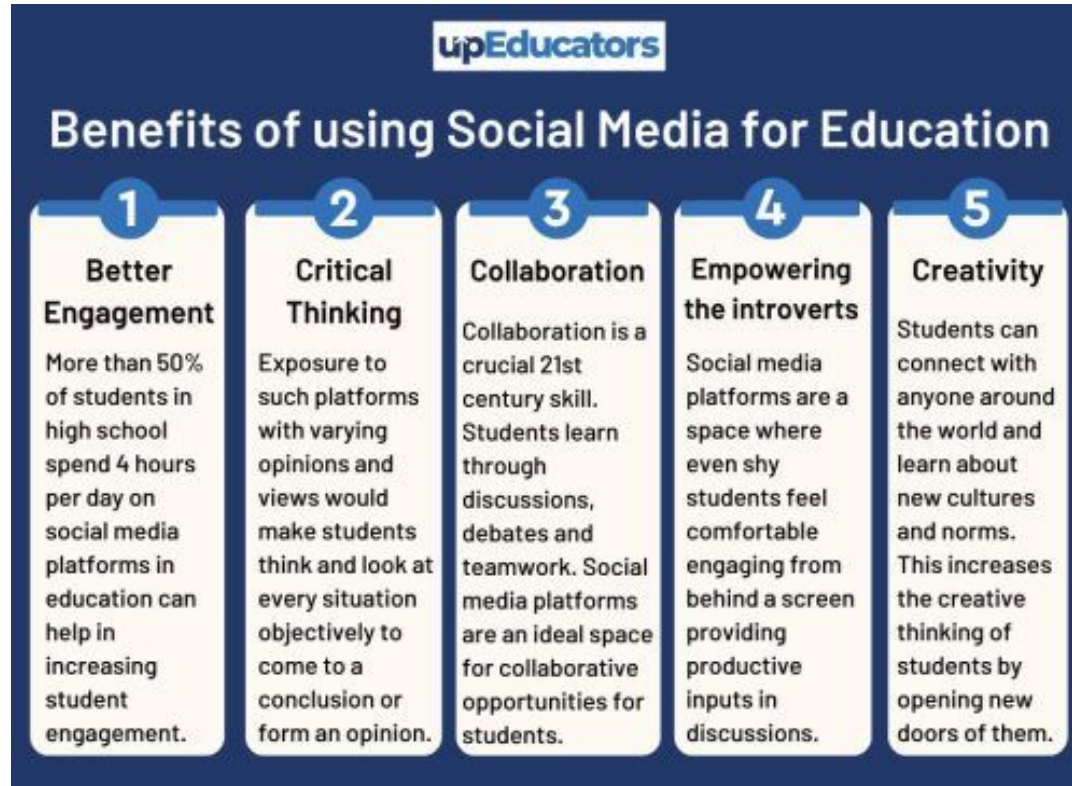
Social listening:

Film makers can take a look into

- Do you know what is being said about your venue on social media?
- Do you know what conversations are happening on social media around the films that you're screening?
- Are you following relevant industry hashtags? E.g. #indiefilm #cinema
- Are you using the industry hashtag for a movie you are screening? E.g. #BoyhoodMovie

Listening to users and monitoring hashtags helps them find out what the audiences wants, tells them if there is any negative sentiment about the venue that they need to deal with, and may suggest new possibilities for them to consider.

Social Media in Education :



Social Media in Public Sector

- **Improved communication with the public:** Social media platforms allow public sector organizations to directly communicate with the public, providing real-time updates and information about services and initiatives.
- **Increased transparency:** Social media can help increase transparency in government operations by providing a platform for open communication and allowing the public to directly engage with and ask questions of government officials.
- **Improved customer service:** Social media can be used as a customer service tool, allowing public sector organizations to quickly and effectively address issues and concerns raised by the public.

Social Media in Public Sector

- **Greater reach and engagement:** Social media allows public sector organizations to reach and engage with a wider audience, including those who may not traditionally interact with government.
- **Increased efficiency and cost savings:** By using social media for tasks such as answering frequently asked questions, public sector organizations can save time and resources that would otherwise be spent on more traditional forms of communication.
- **Enhanced crisis management:** Social media can be used to quickly disseminate important information during a crisis and coordinate responses.

Social Media Capabilities and Benefits in the Public Sector

Capability	Benefits
Expand marketing campaigns to your existing or new audience.	Allows the sector to reach an existing or new audience from the citizen population to promote services, and or benefits available to them in real-time via additional channels.
Connects with your audience, when, where, and how they want to be reached.	Ability to connect with citizens in targeted manners via social media they used in their everyday lives, on-the-go, and in real-time .
Build an interactive communities to share ideas and information.	<p>Creating a collaborative forum to engage citizens in sharing ideas and disseminating information:</p> <ul style="list-style-type: none">• Allow for group collaboration of citizens to solve problems and share concerned ideas.• Share relevant information and enhance services with citizens input.

Social Media and the Public Sector

Collect and Track Citizens Feedback.

Capability	Benefits
Track Feedback across multiple social media channels.	Ability to listen to the customer and solve issues in a timely manner across various social media channels – Facebook, Twitter, Google Plus, Web-blogs etc.
Analyze data to understand citizens needs/expectations to quickly identify gaps and take actions in real-time .	Understand citizens information in media channels and compare to other sources (calls, email, letters etc.) to optimize how your agency enhances marketing campaigns, service development and availability.

Enhance / Develop New Programs and Services

Capability	Benefits
Engage Citizens to test and/or develop new programs/services.	Ability to engage citizens in a real-time conversations on thoughts, views and ideas on existing programs/services, as well as gather thoughts on new/upcoming programs/services.
Engage in two-way conversations with citizens to build stronger and loyal relationships.	As agencies starts to listen to citizens and show they are responding to their opinions and ideas, an agency will build a stronger, trusted, loyal and a more personal relationship with the citizens.

Social Media Uses by Individual / Organization

A Social media user whether an individual or an organization , uses Social media majorly for three types of uses :

- Broadcast /Sending Information
- Request/ Feedback Input
- Conversation Interaction

Analyze How Individual / Organization is using Social Media?

Following questions should serve as starting point to analyze the social media usage :

- Who is **doing the posting**?
- Who are the **target audience** members?
- Why is the **audience engaged** in social media with the organization?
- What **type of content** or interaction is the audience interested in?
- What are the **goals of the user**? Which of the three interaction methods above are they using?
- How is the **user using social media**?
- Do the **user's actions support the goals**?

- Whether it's Facebook, Twitter, TikTok, Snapchat, or Instagram, companies design social media platforms to curate information for people based on specific factors:
 - Demographic information (age, gender, and location)
 - Interests (for example, soccer, music, or photography)
 - Engagement (for example, "likes," clicks, or time spent on page)
- As a user engages — navigating, posting, checking, clicking, liking — the social platform shows the user more content of a similar type.
- Platforms curate political information through the same process. A user who sets their location to St. Louis may notice newly recommended Missouri political forums on their social media feed, for example.

Case Study 1

- Social media is frequently used for investigations.
- **Social media to solve an attempted child abduction**



A scene from the surveillance video released by the Philadelphia Police Department on YouTube and through other social media to help capture the man who attempted to abduct a 10-year-old girl.

Case Study 1- Social media to solve an attempted child abduction

- **The Philadelphia Police Department** has effectively utilized social media platforms such as YouTube, Facebook, and Twitter to gather information about crimes and alert the public about emergencies.
- They have also used smartphone apps to allow people to report incidents and locate local police stations. The department has reported successfully catching 87 suspects through their use of social media.
- In addition, the department has found that social media can be an effective way to receive information from people, as demonstrated by **several witnesses identifying a suspect in an attack after the department posted a video of the incident online.**
- The department has found success in not overwhelming their audience with too much content, posting to Twitter less than 10 times a day, and targeting relevant information to their audience.

Case Study 2 : Predicting elections and astroturfing

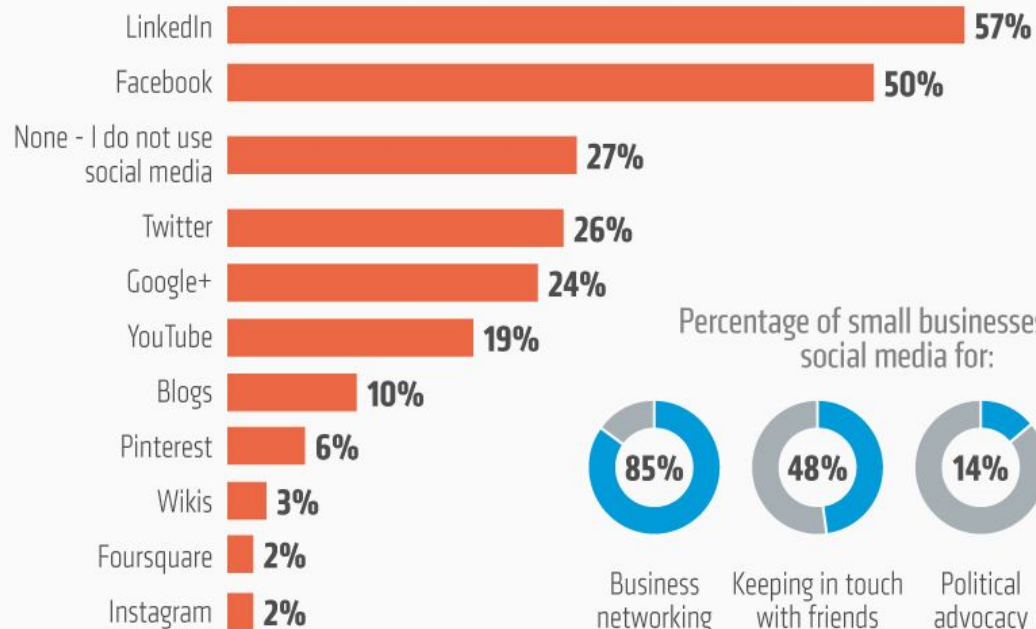
- Social media has become important for political campaigns to reach voters.
- Attempts have been made to use social media trends to predict election outcomes, with initial success but limited overall accuracy.
- The volume of social media posts about a candidate may not accurately reflect public opinion.
- Social media can be effective in generating interest and support for issues and causes.

Business Use of Social Media

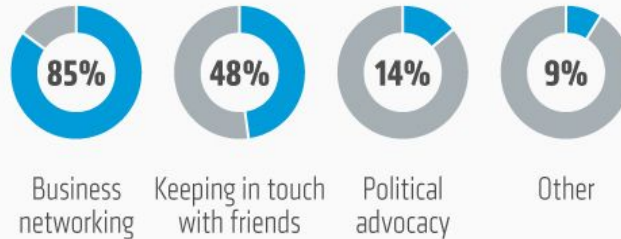
- Businesses and non-profit organizations can use Social Media the same way as in public sector.
- Two major drivers in Business for Social Media are :
 - Marketing
 - Customer Service
- Businesses can communicate with Existing customers or Potential/ interested customers
- Social media helps businesses do comparative analysis to compare how people are discussing a company's product and competitor products.

Social Media is Important For Small Business Owners

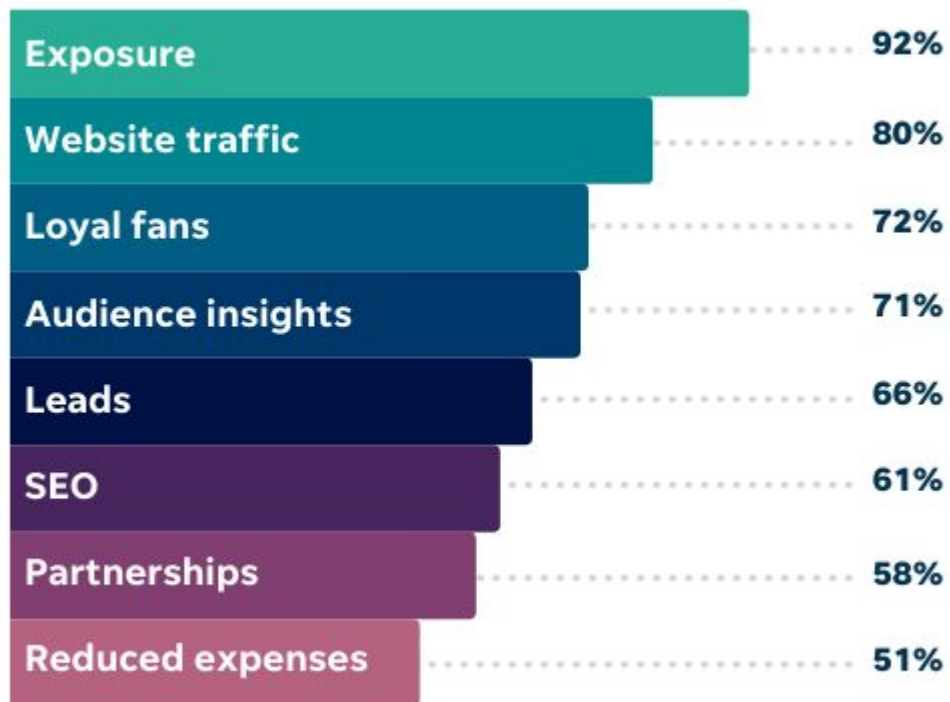
Percentage of small businesses using the following in 2013



Percentage of small businesses using social media for:



BENEFITS OF SOCIAL MEDIA MARKETING



Data source: Smart Insights

Benefits of Social Media for Business :

- Social media can help you engage with your customers and find out what people are saying about your business. You can also use social media for advertising, promotional giveaways and mobile applications.
- Social media can help your business to:
 - attract customers, get customer feedback and build customer loyalty
 - increase your market reach, including international markets
 - do market research and reduce marketing costs
 - increase revenue by building customer networks and advertising
 - develop your brand
 - exchange ideas to improve the way you do business
 - recruit skilled staff, for example through job networking sites like LinkedIn
 - increase traffic to your website and improve its search engine ranking
 - keep an eye on your competitors.

Disadvantages of Social Media :

- Social media may not suit every business. If you launch your social media presence without planning, you could end up wasting valuable time and money.
- Disadvantages of social media include:
 - needing additional resources to manage your online presence
 - social media is immediate and needs active daily monitoring
 - you may get unwanted or inappropriate behavior on your social media site
 - the risk of getting negative feedback, information leaks or hacking
 - the risk of having false or misleading claims made on your social media (by your business or a customer). These claims can be subject to consumer law. For example, if a customer or fan posts misleading or deceptive information, particularly about competitor products or services, you might receive a fine.

Business Use of Social Media

Case Study 1 : **Blendtec, a manufacturer of high-end blenders**

Broadcast example: Will it Blend? Marketing campaign



An example of a “Will It Blend?” YouTube video, showing the blender being used on an iPhone.

Business Use of Social Media

- **Blendtec, a manufacturer of high-end blenders**, has had a highly successful social media campaign through their "**Will It Blend?**" **series on YouTube**, in which the company's founder demonstrates the power of their blenders by blending unusual and sometimes absurd objects.
- This humorous approach has gained the company a significant following and helped to increase sales.
- Their **top-viewed videos** have well over **10 million views** each, and their collection of videos all together have **200 million views**. The company's YouTube channel has over 400,000 subscribers.

Case Study 2- Interaction and monitoring example: Zappos customer service

- Zappos is an online retailer that sells shoes, clothes, and accessories. It was actively engaged in social media, and in 2009 was named as having the best use of social media by Abrams Research, a company that focuses on social media strategy.
- The company **interacts with customers on Twitter and Facebook**, and has a dedicated Twitter account for customer service inquiries.
- A small **team of customer service representatives handle these inquiries**, with an **average response time of under an hour**.
- Zappos' online customer service interactions can also be seen by other social media users, helping to improve the company's reputation.
- Zappos **proactively reaches out to customers** with problems, even if they have not contacted

Case Study 3 : Social Media Failure

- **Social media failure example: Celeb boutique and the NRA**
- Social media mistakes can have significant impacts on a business' reputation and can spread quickly.
- The National Rifle Association (NRA) made a mistake by posting a tweet that was inappropriate given the news of a mass shooting, and quickly deleted the tweet and the account.
- Celeb Boutique made a similar mistake by trying to capitalize on a trending topic related to a mass shooting, and faced skepticism and backlash despite issuing an apology.
- Businesses should be careful about what they post on social media and consider how their content may be perceived by others.
- Connecting a product to a negative idea on social media can generate negative feelings about a brand.

Measuring Success :

- Counts
- Social Sharing
- Engagement Rate
- Interaction
- Referral Rates
- Importance and Influence of Users

Privacy :

- One of the major challenges to using Social Media is Privacy
- Having access to much personal data is a powerful thing.
- Two major issues related to Privacy in Social Media :
 - How the information is shared with other social media users
 - How social media websites and services distribute users' information to other parties
- Some information (like reviews, ratings, comments) is not sensitive or personal in nature...so is unrestricted and is accessible to everyone
- It is important to be **aware of privacy settings** and to carefully consider what personal information is shared online.

- Problems faced by Social media users are increasingly arising from the information that they share online
 - A 24-years old teacher was fired for posting a picture of herself on Facebook holding a glass of wine.
 - A teen was fired after she complained on Facebook that her job was “boring.”
 - A Canadian woman had been diagnosed with major depression and was on disability for it. Her insurance company revoked her benefits, asserting that pictures on her Facebook page that showed her “having fun” were evidence that she was no longer depressed.

Privacy Policies and Settings

- Social media has made it easier for people to share information online.
- Many people **use privacy settings** to restrict who can see their information, but some have difficulty understanding and using these settings.
- The default privacy settings on social media platforms have become more public over time.....E.g. WhatsApp, Facebook, Twitter

- The information collected by sites, how it is used, and how it can be shared with other companies, is rarely controlled through privacy settings. Instead, this is detailed in privacy policies.
- **Privacy policies detail how a social media site collects, uses, and shares user data, which may include personal information, location, and posts.**
- It is important to carefully review privacy policies and understand what information is being shared.
- Some social media sites have more robust privacy controls and policies than others.

Table 16.1 Privacy Attributes of Various Social Media Sites

	Social Networking	Microblogging	Social Bookmarking	Photo Sharing	Cross-cutting	Location-Based Games	Marketplaces
	Facebook	Twitter	Pinterest	Flickr	Google	FourSquare	Craigslist
How is information collected							
From user	X	X	X	X	X	X	
From other websites (e.g. Facebook, twitter)			X			X	
Information shared by others about you	X	X			X		
Behavioral information (from logs, etc)	X	X	X	X	X	X	
What personal information is collected							
name	X	X	X	X	X	X	
email	X	X	X	X	X	X	X
location	X		X	X	X	X	
photo	X		X	X	X	X	
birthday	X			X	X	X	
posts (updates/text/photos/etc)	X	X	X	X	X	X	X
How is information used							
registration	X	X	X	X	X	X	X
send email from the registering site	X	X	X	X	X	X	X
customer service	X		X		X		
recommendations (friends, products, etc)	X		X		X		

personalization sold	X		X		X		
Who is data shared with							
Other users on website - all			X				X
Other users on the website - user controlled	X	X		X	X	X	
Other internet users (not registered with site)	X	X	X	X			X
Third parties (other companies)	X	X	X	X	X	X	
For analysis provided back to registering site	X	X	X	X	X	X	
For marketing products to you	X			X		X	
For any purpose they choose	X					X	
Law enforcement if requested		X	X	X	X	X	X
aggregated NPII data		X			X		
Companies that have an interest in the registering company	X	X	X	X	X	X	
User control issues							
Accounts/data can be totally deleted	X	X	X	X			
Archived copies kept			X		X		X

Aggregation and Data Mining

- It is **challenging to remain anonymous** on social media.
- Personally identifiable information includes data that reveals a user's identity, such as name and photo.
- Combining certain data that is not personally identifiable on its own (like ZIP) can lead to the identification of a user.
- Users may choose to share some information but not others, and techniques are being developed to infer attributes that users have chosen not to share.
- **Research** is being conducted on **aggregation and data mining in the context of social media privacy**.

Deanonymization

- Deanonymization research showed that **anonymous bloggers' identities can be discovered through marketing databases** by matching demographic information like location, age, gender, marital status, and type of housing
- **Maintaining online anonymity is difficult** because even seemingly meaningless pieces of information can be combined to reveal a person's identity
- Advanced computer algorithms can detect and merge multiple accounts belonging to the same person through attributes like addresses and birthdates, structural network data, and other features

Inferring Data

- Anonymous use of social media can be difficult to maintain due to the ability to combine seemingly insignificant pieces of information to identify a person's identity.
- **"Entity resolution"** algorithms can merge anonymous and non-anonymous accounts belonging to the same person.
- Data shared on social media can be used to infer more information about a person, such as sexual orientation, political leanings, and personality traits.

Data ownership and Maintaining Privacy Online

- Social media sites often have complex privacy policies that can be difficult for users to understand and manage.
- **Data shared on social media is rarely truly private and can be accessed or shared by others** with or without users' consent.
- Many social media sites have **business models** that involve **using users' data for advertising and other purposes**, often without paying users or seeking their consent.
- **Users can protect their privacy on social media by being aware of and understanding the privacy policies of the sites they use**, making careful choices about what they share, and assuming that any information they post could potentially be seen by a wide audience.
- It is important for users to remember that **once content is shared on social media, it can be difficult or impossible to fully retract it.**

Respecting Privacy in Social Media Analysis

- **Privacy in social media can be difficult to maintain** due to data sharing practices of companies and the existence of tools that allow others to discover personal information.
- It is important for users to understand who owns their data and how it can be used, as well as to consider the potential consequences of sharing certain information.
- **Researchers should respect the privacy expectations of social media users by collecting data in compliance with website terms of service and policies, anonymizing data when possible, and obtaining informed consent for more sensitive data.**
- **Institutions such as Institutional Review Boards (IRB)** can help ensure that research protocols involving human subjects, including those involving social media analysis, follow ethical guidelines for protecting privacy.