



# Information Technology Engineering

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Module A.4

# **Social Networking**

## Reference:

# Ethics in Information Technology

6th Edition

George W. Reynolds



## Chapter 9: Social Networking

# Objectives

- **What** are social networks, **how** do people use them, and what are some of their **practical business uses**?
- **What are some of the key ethical issues associated with the use of social networking Web sites?**
- **What is a virtual life community, and what are some of the ethical issues associated with such a community?**

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- What is a Social Networking Web Site?
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  - ◇ Cyberstalking
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  - ◇ Uploading of Inappropriate Material
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  - ◇ Educational and Business Uses of Virtual Worlds

# What is Social Media?

- Social media are web-based communication channels and tools that enable people to interact with each other by creating online communities where they can share information, ideas, messages, and other content, including images, audio, and video.

# What is a Social Networking Web Site?

- A site whose purpose is to create an **online community of Internet users** that enables members to **break down barriers created by time, distance, and cultural differences**.
- To interact with friends, family members, and colleagues—people they already know—but they may also wish to develop new personal and professional relationships.



# Who Uses (Old Numbers)!

- In the United States, total minutes per month spent on social networking Web sites **increased 83 percent from April 2008 to April 2009.**
- Total minutes on Facebook grew from **1.7 billion in April 2008 to 13.9 billion in April 2009.**
- About **35 percent of U.S. Internet users age 18 and older have a profile** on an online social networking Web site.
- Meanwhile, **65 percent of teenagers use social networking sites.**



# Popular Social Networking Web Sites

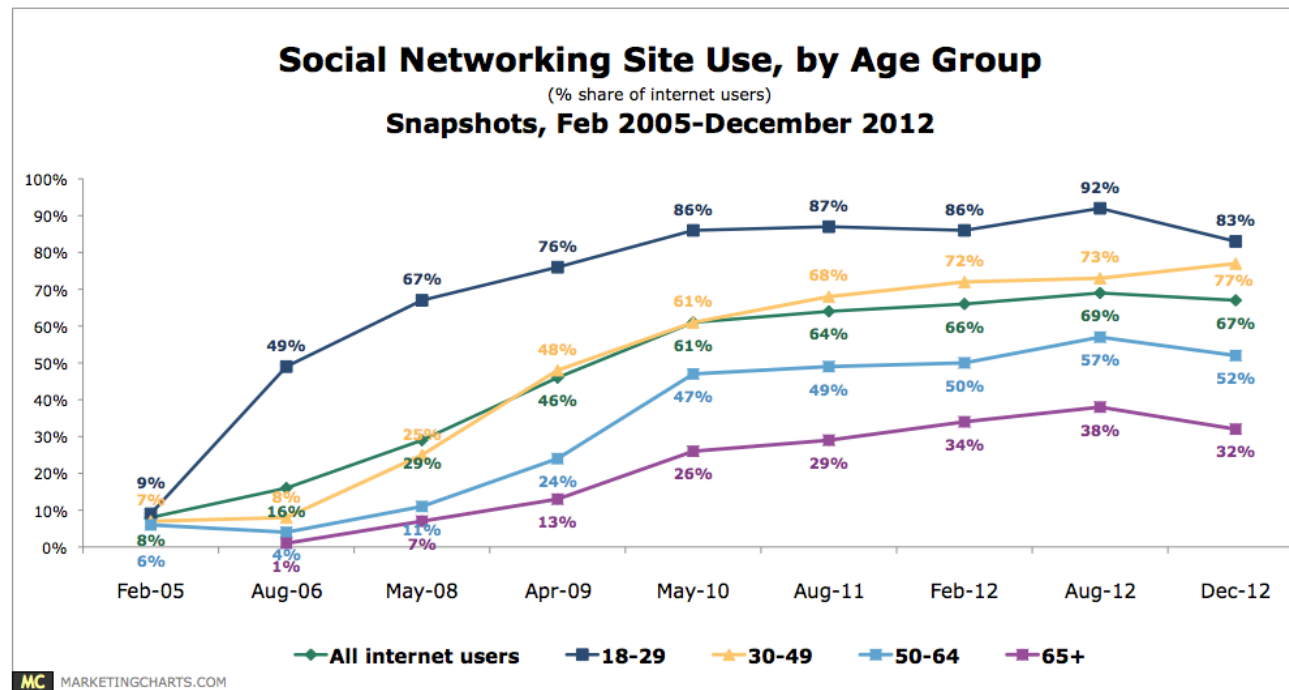
Social networking platform	Unique monthly visitors (million)
Facebook	1,100
YouTube	1,000
Twitter	310
LinkedIn	255
Pinterest	250
Google Plus+	120
Tumblr	110
Instagram	100
Reddit	85
VK	80
Flickr	65
Vine	42
Meetup	40
Ask.fm	37
ClassMates	15

## Most popular U.S. social networks for Internet users age 18 and older

Social network	Percent of all U.S. adult social network users with a profile on this site as of May 2008
MySpace	50%
Facebook	22%
LinkedIn	6%
Yahoo	2%
YouTube	1%
Classmates.com	1%
Others (BlackPlanet, Orkut, hi5, and Match.com)	10%

Source: Amanda Lenhart, "Adults and Social Network Websites," Pew Internet & American Life Project, January 14, 2009, [www.pewinternet.org/Reports/2009/Adults-and-Social-Network-Websites.aspx](http://www.pewinternet.org/Reports/2009/Adults-and-Social-Network-Websites.aspx).

# Social Networking: Age Group

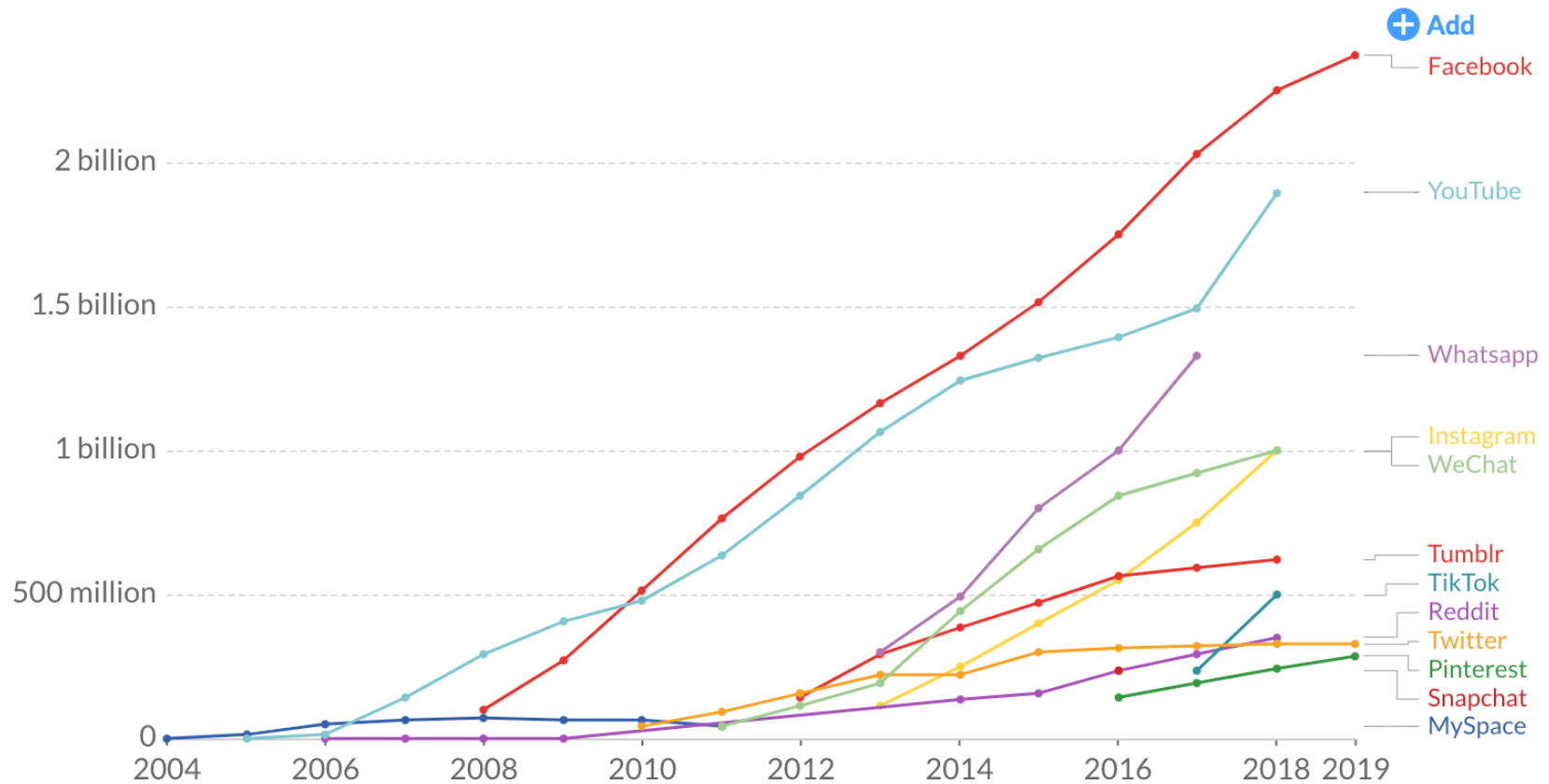


Source: Pew Research Center's Internet & American Life Project

# Number of people using social media platforms

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.

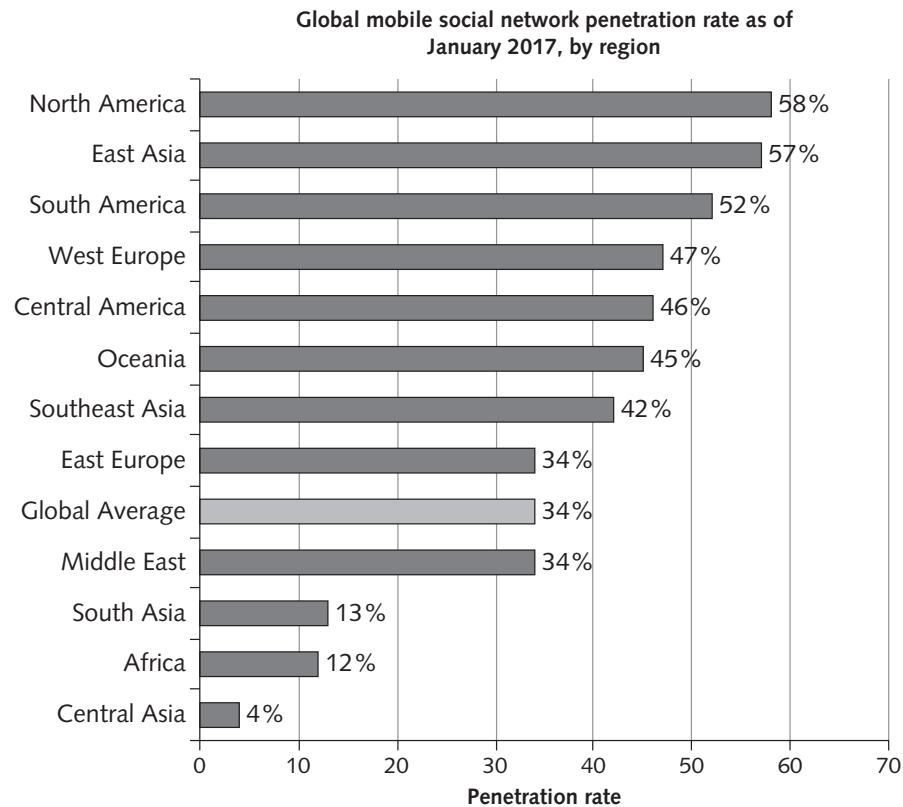
Our World  
in Data



Source: Statista and TNW (2019)

CC BY

# Social Network Penetration



**FIGURE 9-1** Global mobile social network penetration rate, as of January 2017

Source: Global mobile social network penetration rate as of January 2017, by region at <https://www.statista.com/statistics/412257/mobile-social-penetration-rate-region/>

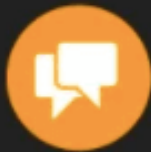
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2022**

# OVERVIEW OF SOCIAL MEDIA USE

HEADLINES FOR SOCIAL MEDIA ADOPTION AND USE [NOTE: USERS MAY NOT REPRESENT UNIQUE INDIVIDUALS]



NUMBER OF SOCIAL  
MEDIA USERS



**4.62  
BILLION**



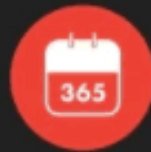
QUARTER-ON-QUARTER  
CHANGE IN SOCIAL MEDIA USERS



**+1.7%  
+77 MILLION**



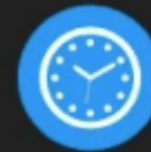
YEAR-ON-YEAR CHANGE  
IN SOCIAL MEDIA USERS



**+10.1%  
+424 MILLION**



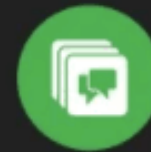
AVERAGE DAILY TIME SPENT  
USING SOCIAL MEDIA



**2H 27M  
+1.4% (+2M)**



AVERAGE NUMBER OF SOCIAL  
PLATFORMS USED EACH MONTH



**7.5**

SOCIAL MEDIA USERS  
vs. TOTAL POPULATION



**58.4%**



SOCIAL MEDIA USERS  
vs. POPULATION AGE 13+



**74.8%**



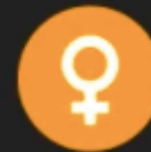
SOCIAL MEDIA USERS  
vs. TOTAL INTERNET USERS



**93.4%**



FEMALE SOCIAL MEDIA USERS  
vs. TOTAL SOCIAL MEDIA USERS



**46.1%**



MALE SOCIAL MEDIA USERS  
vs. TOTAL SOCIAL MEDIA USERS



**53.9%**

**SOURCES:** KEPIS ANALYSIS, COMPANY ADVERTISING RESOURCES AND ANNOUNCEMENTS, CNNIC, TECHBASA, OECD, U.N., U.S. CENSUS BUREAU. DATA FOR **TIME SPENT** AND **AVERAGE NUMBER OF PLATFORMS**: GWI (Q3 2021). SEE [GWI.COM](https://www.gwi.com) FOR MORE DETAILS. **NOTE:** AVERAGE PLATFORMS FIGURE INCLUDES DATA FOR YOUTUBE. **ADVISORY:** SOCIAL MEDIA USERS MAY NOT REPRESENT UNIQUE INDIVIDUALS. FIGURES FOR REACH vs. POPULATION AND REACH vs. INTERNET USERS MAY EXCEED 100% DUE TO DUPLICATE AND FAKE ACCOUNTS, DELAYS IN DATA REPORTING, AND DIFFERENCES BETWEEN CENSUS COUNTS AND RESIDENT POPULATIONS.

**we  
are  
social**

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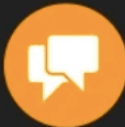
**JUL  
2022**

## OVERVIEW OF SOCIAL MEDIA USE

HEADLINES FOR SOCIAL MEDIA ADOPTION AND USE (NOTE: USERS MAY NOT REPRESENT UNIQUE INDIVIDUALS)



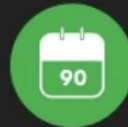
NUMBER OF SOCIAL  
MEDIA USERS



**4.70  
BILLION**



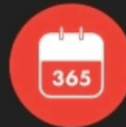
QUARTER-ON-QUARTER  
CHANGE IN SOCIAL MEDIA USERS



**+1.0%  
+47 MILLION**

we  
are  
social

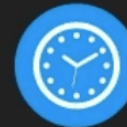
YEAR-ON-YEAR CHANGE  
IN SOCIAL MEDIA USERS



**+5.1%  
+227 MILLION**



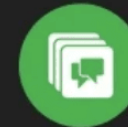
AVERAGE DAILY TIME SPENT  
USING SOCIAL MEDIA



**2H 29M**  
YOY: +3.5% (+5 MINS)

GWJ.

AVERAGE NUMBER OF SOCIAL  
PLATFORMS USED EACH MONTH



**7.4**

SOCIAL MEDIA USERS  
vs. TOTAL POPULATION



**59.0%**



SOCIAL MEDIA USERS  
vs. POPULATION AGE 13+



**75.5%**



SOCIAL MEDIA USERS  
vs. TOTAL INTERNET USERS



**93.6%**



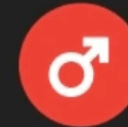
FEMALE SOCIAL MEDIA USERS  
vs. TOTAL SOCIAL MEDIA USERS



**45.7%**

we  
are  
social

MALE SOCIAL MEDIA USERS  
vs. TOTAL SOCIAL MEDIA USERS



**54.3%**

107

**SOURCES:** KEPIOS ANALYSIS; COMPANY ADVERTISING RESOURCES AND ANNOUNCEMENTS; CNNIC; TECHRASA; OGDH; U.N.; U.S. CENSUS BUREAU. DATA FOR TIME SPENT AND AVERAGE NUMBER OF PLATFORMS: GWJ (Q1 2022). SEE [GWJ.COM](https://www.gwj.com) FOR MORE DETAILS. **NOTE:** FIGURE FOR "AVERAGE NUMBER OF SOCIAL PLATFORMS USED EACH MONTH" INCLUDES DATA FOR YOUTUBE. **ADVISORY:** SOCIAL MEDIA USERS MAY NOT REPRESENT UNIQUE INDIVIDUALS. FIGURES FOR REACH vs. POPULATION AND REACH vs. INTERNET USERS MAY EXCEED 100% DUE TO DUPLICATE AND FAKE ACCOUNTS, DELAYS IN DATA REPORTING, AND DIFFERENCES BETWEEN CENSUS COUNTS AND RESIDENT POPULATIONS. SEE [NOTES ON DATA](#) FOR FURTHER DETAILS.

we  
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# Social Network Advertising

- Use of social networks to inform, promote, and communicate the benefits of products and services
- In 2009, ad spending on Facebook estimated to be \$230 million, and ad spending on MySpace estimated to be \$495 million
- **Two main advantages** of social networking ads:
  1. Advertisers can create an opportunity to generate a conversation with viewers of the ad
  2. Ads can be targeted to reach people with the desired demographic characteristics



**JAN  
2022**

# INSTAGRAM: ADVERTISING AUDIENCE OVERVIEW

THE POTENTIAL AUDIENCE THAT MARKETERS CAN REACH WITH ADS ON INSTAGRAM



TOTAL POTENTIAL REACH  
OF ADS ON INSTAGRAM



**1.48**  
BILLION



INSTAGRAM AD REACH  
vs. TOTAL POPULATION



**18.7%**



QUARTER-ON-QUARTER CHANGE  
IN INSTAGRAM AD REACH



**+6.1%**  
**+85 MILLION**



YEAR-ON-YEAR CHANGE  
IN INSTAGRAM AD REACH



**+21.0%**  
**+257 MILLION**

INSTAGRAM AD REACH  
vs. TOTAL INTERNET USERS



**29.9%**



INSTAGRAM AD REACH  
vs. POPULATION AGED 13+



**23.9%**



FEMALE INSTAGRAM AD REACH  
vs. TOTAL INSTAGRAM AD REACH



**49.3%**



MALE INSTAGRAM AD REACH  
vs. TOTAL INSTAGRAM AD REACH



**50.7%**

142

**SOURCES:** META'S ADVERTISING RESOURCES; KEPIOS ANALYSIS. **ADVISORY:** AUDIENCE FIGURES MAY NOT REPRESENT UNIQUE INDIVIDUALS, AND MAY NOT MATCH EQUIVALENT FIGURES FOR THE TOTAL ACTIVE USER BASE. FIGURES FOR REACH vs. POPULATION AND REACH vs. INTERNET USERS MAY EXCEED 100% DUE TO DUPLICATE AND FAKE ACCOUNTS, DELAYS IN DATA REPORTING, AND DIFFERENCES BETWEEN CENSUS COUNTS AND RESIDENT POPULATIONS. **NOTES:** FIGURES USE MIDPOINT OF PUBLISHED RANGES. REACH DATA ARE ONLY AVAILABLE FOR "FEMALE" AND "MALE" USERS. **COMPARABILITY:** META SIGNIFICANTLY REVISED ITS BASE DATA AND APPROACH TO AUDIENCE REPORTING IN Q4 2021, SO FIGURES SHOWN HERE MAY NOT BE COMPARABLE WITH FIGURES PUBLISHED IN PREVIOUS REPORTS.



# Taxonomy of Social Network Advertising

1. Direct Advertising
2. Advertising Using an Individual's Network of Friends
3. Indirect Advertising Through Groups
4. Company-Owned Social Networking Web Site
5. Viral Marketing



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## The Use of Social Networks in the Hiring Process

- **60 percent of hiring managers use social networking** web sites as a source of information about candidates
- **50 percent have found information** that made them drop a candidate from consideration
- **Employers can legally reject a job applicant based on the contents of the individual's social networking profile**
- **47 percent** of college graduates who use social networking web sites **change the contents of their pages as a result of their job search**

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# Social Shopping Web Sites

brings shoppers and sellers together in a social networking environment in which members can **share information** and **make recommendations** while shopping online

Platform	Description
Fancy	A site where users can discover products that have been curated by its global community and buy from thousands of different stores directly through the platform; each user gets their own profile that shows off everything that they “Fancy’d.” By following others members, users can see the products those users are Fancying in their feed.
MyDeco	A site with a focus on interior design and home decor; users can mock up virtual rooms using their favorite products.
MyITThings	Both a shopping site and a fashion magazine that allows users to place products they bought in a virtual closet; the platform also allows users to review books, music, and other products.
OpenSky	A platform that offers products for sale in a wide variety of categories, including accessories, beauty, clothing, electronics, jewelry, kitchen, sporting goods, toys, and more; users can add products to their wish lists, follow other sellers, and invite friends to join in order to earn shopping rewards, such as shipping deals and credits toward future purchases.
Pinterest	One of the most popular social shopping sites and visual bookmarking tools; Pinterest enables users to visually share and discover new interests (recipes, parenting tips, style ideas, etc.) by posting (known as “pinning”) images or videos to their own or others’ boards. Users can also browse items that other users have pinned.
Polyvore	A combination social network and digital fashion magazine popular with home designers and clothing fashionistas, who can use its tools for grouping related items visually; users find images of things they like all from sites across the web, and then save them into sets of related images, which the site calls collages.
Wanelo	An Internet shopping mall where people can discover and make purchases from a broad selection of over 12 million products; the more that you interact on Wanelo and the more products that you save, the more the site learns about you and the better it’s able to recommend products based on what you already like.

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# Cyberbullying

- The harassment, torment, humiliation, or threatening of **one minor by another minor** or group of minors via the Internet or cell phone
- Over 800 students ages 13–17, about 43 percent had experienced cyberbullying in the past year.
- Cyberbullying is more common among females and among 15- and 16-year-olds
- Cyberbullying has sometimes become so intense that some children have committed suicide as a result



# Cyberbullying: Cases

- Sending mean-spirited or threatening messages to the victim
- Sending thousands of text messages to the victim's cell phone
- Impersonating the victim and sending inappropriate messages to others
- Stealing the victim's password and modifying his or her profile to include racist, homophobic, sexual, or other inappropriate data that offends others or attracts the attention of undesirable people

# Cyberbullying: Cases

- Posting mean, personal, or false information about the victim in the cyberbully's blog
- Creating a Web site whose purpose is to humiliate or threaten the victim
- Taking inappropriate photos of the victim and either posting them online or sending them to others via cell phone
- Setting up an Internet poll to elicit responses to embarrassing questions
- Sending inappropriate messages while playing interactive games that enable participants to communicate with one another

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# Cyberstalking

- Threatening behavior or unwanted advances directed at an adult using the Internet or other forms of online and electronic communications
- Adult version of cyberbullying



# Cyberstalking: Countermeasure

- When the offender is known, victims should send the stalker a written notice that their contact is unwanted and that all further contact must cease.
- Evidence of all contacts should be saved.
- Victims of cyberstalking should inform their ISP provider as well as the stalker's ISP, if possible.
- Victims should consider speaking to law enforcement officers.
- Above all else, victims of cyberstalking should **never agree to meet with the stalker** to “talk things out.”

# Examples of cyberharassment and cyberstalking

Cyberharassment	Cyberstalking	Neither
Someone keeps sending you instant messages after you have asked them to stop.	Someone sends you a credible threat that they are “out to get you.”	Someone posts a strongly worded dissenting opinion to your post on a social network.
Someone posts a message in such a manner that it appears to have come from you.	An unknown individual keeps sending you messages like, “I saw you at....”: the messages name specific locations you have been.	Someone posts a message disparaging members of a particular race, ethnic group, or sexual orientation to which you belong.
Someone posts explicit or embarrassing photos or videos of you (revenge porn) without your permission.	An unknown individual posts photos of you taken over several days in different locations, without you even being aware that your photo was taken.	

## Resources for information related to cyberabuse

Organization	Website
Association for Progressive Communications	<a href="https://www.apc.org/en/pubs/issue/how-avoid-becoming-cyberstalking-victim">https://www.apc.org/en/pubs/issue/how-avoid-becoming-cyberstalking-victim</a>
FightCyberstalking	<a href="https://www.fightcyberstalking.org">https://www.fightcyberstalking.org</a>
Privacy Rights Clearinghouse	<a href="https://www.privacyrights.org">https://www.privacyrights.org</a>
Working to Halt Online Abuse	<a href="http://www.haltabuse.org">http://www.haltabuse.org</a>
Stalking Risk Profile	<a href="https://www.stalkingriskprofile.com/victim-support/cyberstalking">https://www.stalkingriskprofile.com/victim-support/cyberstalking</a>



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# Inappropriate Materials

- Sex Offender
- Depicting Violence or Obscenity
- Youtube Problems

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# Online Virtual World

- A **computer-simulated world** in which a visitor can move in three-dimensional space, communicate and interact with other visitors, and manipulate elements of the simulated world.
- A visitor to a virtual world represents him- or herself through an **avatar**



# What happens in Virtual World

- Shop, hold jobs, run for political office
- Develop relationships with other avatars
- Take a test drive in a virtual world car, and even engage in criminal activities.
- Promote events and hold them in the virtual world (e.g., garage sales or concerts)
- Start up new businesses and create or purchase new entities, such as houses, furnishings for their houses, clothing, jewelry, and other products
- Use the virtual world's currency to purchase goods and services in the virtual world.

# Popular Virtual Worlds

Virtual world	Description
Coke Studios	Virtual world in which teens and young adults can create customized music mixes in a virtual music studio, play them for other members, and receive ratings for each mix; favorable ratings allow members to earn points that can be used to purchase virtual furnishings for their personal studio areas
Disney's Toontown Online	Disney's virtual world, designed for children as young as seven years old; visitors can play games, dress their cartoon avatars, and communicate with other visitors through a drop-down menu of phrases
Habbo Hotel	Virtual world for teens, built around a hotel theme; visitors can purchase furniture to decorate their guest rooms or mingle in the lobby
Second Life	Highly imaginative three-dimensional world that is appealing to young adults; avatars are very customizable, and users can change every micro-pixel of their avatar's shape, size, and color
The Sims Online	A networked version of the Sims computer game, targeted at teens and young adults; the object of the game is to earn as much currency as possible to furnish one's virtual home with beautifully rendered household objects

Source: Virtual Worlds Review, [www.virtualworldsreview.com/index.shtml](http://www.virtualworldsreview.com/index.shtml).

# Crime in Virtual Worlds

- Trafficking in actual drugs or stolen credit cards
- Other virtual activities, such as online muggings and sex crimes

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# Educational and Business Uses of Virtual Worlds

- **New Media Consortium (NMC)**
  - Almost 300 organizations focused on exploring the use of new media and technologies to improve teaching, learning, and creative expression.
  - Attracts nearly 1,500 unique visitors to its Second Life campus each week.
  - **Princeton, Yale, the University of Southern California, Ball State, and New York University** are just a few of the schools with a campus in Second Life.
- **Northrop Grumman Corporation (NGC)**
  - built a simulation of its Combat Information Center (CIC) in Second Life to provide a real-to-life training experience for its future operators