



Al-Mustaqbal University / College of Technical Engineering
Department (Department of Cybersecurity Techniques Engineering)
Class (First)

Ethics for the Information Age/ Code -UOMU0208025
Lecturer (Dr. Ahmed Hasan Al-Janabi & Msc. Heba Hussien)



2nd term – Lecture 5 Impact of Social Media and Online Advertising

Lecture 5

Impact of Social Media and Online Advertising

Ethics for the Information Age

Department of Cybersecurity Engineering Techniques

First Year



1.Introduction

Social media and online advertising are essential parts of modern life, transforming how people communicate and work. They impact areas like education, business, politics, and society, and are used daily for messaging, learning, shopping, and entertainment.

However, they also create security risks and ethical challenges that require awareness and proper regulation.

These platforms influence:

- Communication
- Education
- Business
- Politics
- Society
- Privacy
- Cybersecurity

People use them daily for:

- Messaging
- Sharing content
- Shopping
- Learning
- Entertainment

However, they also introduce security risks and ethical challenges that must be carefully examined and addressed through proper education, awareness, and policy development.

2. What is Social Media?

Definition

Social Media refers to web-based platforms and applications that enable users to create, share, and exchange content and ideas in virtual communities and networks. The fundamental characteristic of social media is its emphasis on user-generated



content

and interactive dialogue, distinguishing it from traditional broadcast media where content flows in one direction.

Social Media platforms allow users to:

- Create profiles
- Connect with others
- Share content (text, images, videos)
- Communicate through messages and comments

Examples:

- Facebook - General social networking
- Instagram - Photo and video sharing
- Twitter (X) - Microblogging and news
- TikTok - Short-form video content
- Snapchat - Ephemeral messaging
- YouTube - Video sharing platform
- LinkedIn - Professional networking

Key Features:

- User profiles
- Followers/Friends
- Posts
- Comments
- Likes and shares
- Messaging

3. Impact of Social Media on Society

Social Impact

Social media has greatly changed how people interact, share information, and influence society. It allows individuals to reach global audiences easily, shaping opinions and enabling collective action. It also plays a major role in politics, education, and public discussions, often spreading information faster than traditional media.



It affects areas like communication, education, business, politics, public opinion, and social relationships. Examples include fast news sharing, online learning, digital marketing, political campaigns, and raising social awareness.

Overall, social media is a powerful tool that requires responsible use and critical thinking.

Social media affects many aspects of life:

- Communication style
- Education systems
- Business marketing
- Political activities
- Public opinion
- Social relationships

Examples of Impact:

- Fast news sharing
- Online education
- Digital marketing
- Political campaigns
- Social awareness

Social media is a powerful tool that shapes society in profound ways, requiring responsible use and critical evaluation of its effects.

4. Advantages of Social Media

Social media platforms offer numerous benefits that have transformed how individuals and organizations operate in the modern world. These advantages span personal, professional, and societal domains, providing unprecedented opportunities for connection, learning, and growth. Understanding these benefits is essential for developing a balanced perspective on social media's role in contemporary society.



Advantage	Description
Communication	Connect globally with friends, family, and colleagues
Education	Access online learning resources and educational content
Business	Marketing, sales, and customer engagement opportunities
News	Fast access to information and real-time updates
Entertainment	Videos, games, and creative content consumption
Jobs	Career opportunities and professional networking
Awareness	Social campaigns and public health initiatives

Table 1: Advantages of Social Media

5. Disadvantages of Social Media

While social media has many benefits, it also comes with important risks. These include privacy violations, mental health issues, misinformation, and cybercrime.

Its wide reach, fast communication, and user-generated content can create problems such as misuse of personal data, online harassment, and the rapid spread of false information. It can also lead to addictive behavior and negatively affect mental health, especially among young people.



Disadvantage	Description
Privacy issues	Personal data exposure and unauthorized access
Cyberbullying	Online harassment and psychological harm
Fake news	False information and misinformation spread
Addiction	Excessive usage and dependency issues
Scams	Fraudulent schemes and financial crimes
Malware links	Harmful links leading to infections
Identity theft	Fake accounts and impersonation
Hacking	Account compromise and unauthorized access

Table 2: Disadvantages of Social Media

Social media is a significant target for cyber attacks, making cybersecurity awareness essential for all users.

6. Online Advertising

What is Online Advertising?

Online advertising is the use of the internet to promote products or services to targeted audiences. It allows precise targeting, real-time performance measurement, and campaign optimization, but also raises privacy and ethical concerns..

Types of Online Ads:



- Banner Ads - Display advertisements on websites
- Video Ads - Promotional video content
- Pop-up Ads - Intrusive overlay advertisements
- Social Media Ads - Platform-specific advertising
- Search Engine Ads - Pay-per-click advertising
- Email Ads - Promotional email campaigns

Companies use online ads to reach specific audiences with tailored messages, often based on collected user data.

7. Targeted Advertising

Online advertising is the use of the internet to promote products or services to targeted audiences. It allows precise targeting, real-time performance measurement, and campaign optimization, but also raises privacy and ethical concerns.

Data Collected for Targeting:

- Age and demographic information
- Geographic location
- Search history
- Websites visited
- Purchase history
- Interests and hobbies
- Likes and shares

Example:

If you search for a phone online, you will subsequently see phone advertisements across various websites and platforms you visit. This is the result of targeted advertising systems recognizing your interest and serving relevant ads accordingly.

Targeted advertising involves extensive tracking and data collection, raising significant privacy implications.



8. Privacy Issues

Privacy Concerns

Privacy issues represent one of the most significant ethical challenges associated with social media and online advertising. The business models of many social media platforms depend on the collection, analysis, and monetization of user data, creating inherent tensions between commercial interests and individual privacy rights. Understanding these privacy concerns is essential for developing appropriate protective measures and advocating for stronger privacy protections.

Major privacy issues include:

1. Data collection without consent
2. User tracking across websites
3. Selling user data to third parties
4. Location tracking and monitoring
5. Personal data exposure
6. Cookies tracking
7. Facial recognition technology

Examples of Collected Data:

1. Name
2. Email address
3. Phone number
4. Location
5. Photos
6. Interests and preferences

These privacy issues raise significant ethical concerns regarding user consent, data ownership, and the right to privacy in the digital age.



9. Ethical Issues

Ethical Issues in Social Media and Advertising

The intersection of social media, online advertising, and ethics presents complex challenges that require careful consideration by individuals, organizations, and policymakers. These ethical issues extend beyond simple questions of right and wrong to encompass systemic concerns about power, consent, manipulation, and social responsibility. Addressing these issues requires a multi-stakeholder approach that balances commercial interests with individual rights and societal well-being.

Issue	Description
Privacy violation	Data collected without explicit permission
Data selling	Sharing or selling user data to third parties
Manipulation	Influencing user behavior through algorithms
Fake accounts	Identity fraud and impersonation
Fake news	Spread of misinformation and disinformation
Cyberbullying	Online harassment and abuse
Addiction	Mental health impact and dependency
Political influence	Affecting elections and public opinion

Table 3: Ethical Issues in Social Media and Advertising



Companies have ethical responsibilities to protect user data, ensure transparency, and prevent harm to users and society.

10. Social Media and Cybersecurity

Security Risks

Social media platforms pose significant cybersecurity risks due to the large amount of personal data and trust-based interactions, making them attractive targets for cybercriminals. These risks affect not only individuals but also organizations, as employee activity may expose sensitive information or create entry points for attacks. Understanding these risks is essential for strong cybersecurity strategies.

Social media platforms can be used for:

- Phishing attacks
- Social engineering
- Identity theft
- Malware distribution
- Account hacking
- Information gathering
- Scams
- Fake profiles

Attackers use social media to collect user data for targeted attacks, making security awareness critical.

11. Social Engineering

Social engineering is the manipulation of people to reveal confidential information or perform actions that compromise security. Instead of exploiting technical flaws, it targets human psychology and trust, with social media providing an ideal environment.

These attacks succeed by exploiting traits like helpfulness, trust in authority, and fear of missing out, often creating urgency that prevents careful thinking.

Examples of Social Engineering:



- Fake messages appearing to be from trusted sources
- Impersonation of friends, family, or colleagues
- Requests for passwords or credentials
- Fake links leading to malicious websites
- OTP (One-Time Password) requests for "verification"

Social engineering is one of the most dangerous and effective cyber attack methods, exploiting human psychology rather than technical vulnerabilities.

12. Safe Use of Social Media

Security Tips

Protecting oneself on social media requires a combination of technical safeguards and behavioral practices. The following security recommendations represent best practices developed by cybersecurity professionals and should be implemented by all social media users. These measures significantly reduce the risk of account compromise, identity theft, and other security incidents.

Essential Security Practices:

- Do not share personal information publicly
- Use strong, unique passwords for each account
- Enable Two-Factor Authentication (2FA) on all accounts
- Avoid accepting unknown friend requests
- Do not click suspicious links or download unknown attachments
- Review and adjust privacy settings regularly
- Do not share your real-time location
- Update apps regularly to patch security vulnerabilities

13. Ethical Use of Social Media

Ethics

Ethical behavior on social media extends beyond personal security to encompass responsibilities toward others and society at large. Users should consider the impact of their online actions on other individuals, communities, and the broader



**Al-Mustaqbal University / College of Technical Engineering
Department (Department of Cybersecurity Techniques Engineering)
Class (First)**

**Ethics for the Information Age/ Code -UOMU0208025
Lecturer (Dr. Ahmed Hasan Al-Janabi & Msc. Heba Hussien)**



2nd term – Lecture 5 Impact of Social Media and Online Advertising

information ecosystem. The following principles guide ethical social media use and contribute to a healthier online environment.

Users should:

- Respect others in all interactions
- Avoid participating in or enabling cyberbullying
- Do not spread fake news or unverified information
- Respect the privacy of others
- Avoid creating fake accounts or impersonating others
- Do not steal or misuse others' content
- Share information responsibly and thoughtfully