

# DEMOCRACY AT RISK: EU POLITICS IN THE 21<sup>ST</sup> CENTURY



UNIVERSITY OF PELOPONNESE

JEAN MONNET MODULE 2023-2025

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# TODAY'S DISCUSSION



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- Digital Competence
- Internet
- Digital Inclusion
- Deep/Dark Web
- Data Privacy

# DIGITAL COMPETENCE

## definition



The capacity to respond pragmatically and intuitively to challenges and opportunities in a manner that exploits the Internet's potential and avoids frustration (Hargittai 2002).

# INTERNET

what is it?



Internet is a global network of interconnected computers/devices

# INTERNET

## protocols/applications



- World Wide Web
- FTP
- Email
- Instant Messaging - IRC
- Torrents
- IPTV
- VoIP

# INTERNET ACCESS



## Capability or Human Right?

- How can internet access empower individuals/societies?
- What is the impact of limited internet access to marginalized communities and disadvantaged population?
- What is/should be the role of governments/policymakers and organizations in ensuring equal access to the internet?

# INTERNET SOCIAL IMPACT



What is the social impact the internet has on modern society?

→ Education **coursera** **edx** **udemy**

→ Job Searching **LinkedIn** **glassdoor**

→ Health

→ Government Services



→ Social Media   

→ Public Forums **INSOMNIA**

→ Isolation?

# INTERNET SOCIAL IMPACT



- Low Income Parents: How do their children participate in remote school sessions?
- University exams: Through Online Forms & online video meetings.
- Certificates: [PeopleCert](#)
- Travel Shows on YouTube.
- Virtual Reality Tour on a museum/area from remote areas or from disabled people.



# INTERNET SOCIAL IMPACT



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# INTERNET SOCIAL IMPACT



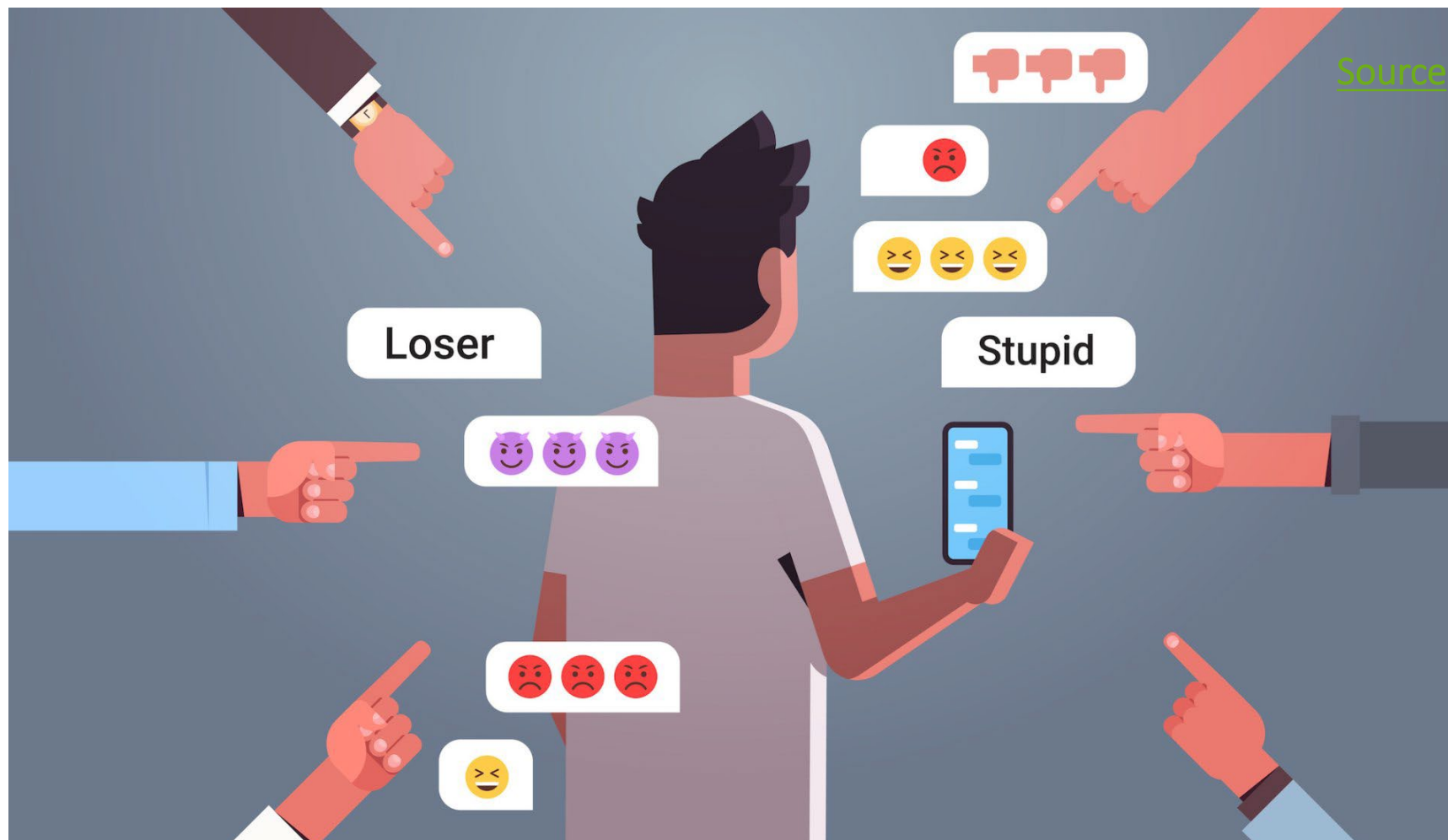
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# INTERNET SOCIAL IMPACT



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# INTERNET SOCIAL IMPACT



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Source

# INTERNET SOCIAL IMPACT



Does the addiction of (young) people on social media diminishes digital inclusion?



If an individual spends too much time on social media how much time is left to spend on other (internet) activities like forums where someone can express opinions? How much of an active citizen can this individual be?

# INTERNET ACCESS



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Meaning of **Access** vs Meaning of **Use**

# INTERNET ACCESS



- No Internet access
- Lack of skills
- Lack of supporting hardware/software for disabled people



Inequality

# INTERNET CENSORSHIP



What about governments blocking access to specific webpages?

- The Great Firewall of **China**: The most extensive internet censorship system in the world. It blocks access to various foreign websites and platforms (e.g., social media platforms, YouTube).
- **Iran**: Blocks access to websites and platforms that they believe to be politically or culturally sensitive.
- **Russia**: Blocks access to various websites and platforms like LinkedIn, Telegram and various independent news websites.



# INTERNET CENSORSHIP



What about governments blocking access to specific webpages?

- **North Korea:** They operate their own intranet called Kwangmyong which restricts access to the global internet. Only a select few individuals have access to a restricted version of the internet.
- **Saudi Arabia:** Internet censorship targeting political dissent, human rights advocacy, and adult content.
- **Turkey:** The Turkish government has periodically blocked access to various websites and social media platforms, particularly during times of political unrest or sensitive events. In recent years, platforms like Twitter, YouTube, and Wikipedia have faced temporary or intermittent blocking.

# INTERNET CENSORSHIP



## Virtual Private Networks (VPN)

A VPN is a technology that creates a secure and encrypted connection over the internet, allowing users to browse the web privately and securely.

When a user connects to a VPN server, their internet traffic is encrypted and routed through the VPN server before reaching the intended destination. This masks their IP address and location, making it appear as if they are accessing the internet from the location of the VPN server.

# DIGITAL INCLUSION

## definition



Digital inclusion refers to the equitable access and meaningful participation of individuals and communities in the digital world. It encompasses ensuring that everyone, regardless of their socio-economic status, geographical location, age, gender, or other factors, has access to digital technologies, the internet, and the skills and knowledge necessary to use them effectively.

# DIGITAL INCLUSION

## OLD-SCHOOL



What about before Internet came to our lives?

Unequal access was there long before the internet came to our lives:

- Premium/Paid TV Channels
- Newspaper/Magazines distribution
- Even Word of Mouth

# DIGITAL INCLUSION



What if printed newspapers/magazines/books were to cease to exist?

What if all of the aforementioned became digital only?

How would that differentiate inequality?

# DIGITAL INCLUSION SOCIOECONOMIC STATUS



How do factors such as gender, race, and socioeconomic status shape inequality in ease, effectiveness, and quality of use of digital technologies?

# DIGITAL INCLUSION



How easy is for an individual to connect to the internet?

- Internet enabled device (computer, smartphone, TV, bridge)
- Network infrastructure (landline, 5G, satellite,...)

# DIGITAL INCLUSION

## INTERNET INFRASTRUCTURE



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# DIGITAL INCLUSION

## INTERNET INFRASTRUCTURE



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## Rural Broadband

ΣΕ ΒΟΡΕΙΑ & ΝΟΤΙΑ ΕΛΛΑΔΑ



Ευρυζωνικές υπηρεσίες σε **2.260** απομακρυσμένες αγροτικές, ορεινές & νησιωτικές περιοχές της Ελλάδας



Δίκτυο οπτικών ινών μήκους **12.000χλμ**



Ταχύτητες Internet έως **50Mbps** σε **323.000** κατοίκους



**ΒΟΡΕΙΑ ΕΛΛΑΔΑ**

**810** οικισμοί

**162.000** κάτοικοι

**ΝΟΤΙΑ ΕΛΛΑΔΑ**

**1.450** οικισμοί

**161.000** κάτοικοι

**ΣΧΕΔΙΑΣΜΟΣ:** ΥΠΟΥΡΓΕΙΟ ΨΗΠΤΕ, ΓΓ ΤΗΛΕΠΙΚΟΙΝΩΝΙΩΝ & ΤΑΧΥΔΡΟΜΕΙΩΝ, ΚΤΠ Α.Ε.

**ΥΛΟΠΟΙΗΣΗ:** ΟΜΙΛΟΣ ΟΤΕ

Source

25

# DIGITAL INCLUSION INTERNET INFRASTRUCTURE



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<https://fttxgr.eu/map>

# DIGITAL INCLUSION

## INTERNET INFRASTRUCTURE



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# DIGITAL INCLUSION

## INTERNET INFRASTRUCTURE



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Ανάπτυξη Ασύρματων Κοινοτικών Δικτύων Πολιτών

# DIGITAL INCLUSION

## INTERNET INFRASTRUCTURE



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Ομιλία Βασίλη Χρυσού TedX Lesvos 2018  
Διευθυντής ΑμΚΕ sarantaporo.gr

# DIGITAL INCLUSION

## INTERNET INFRASTRUCTURE



# DIGITAL INCLUSION

## INTERNET ACCESSIBILITY



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### Προσβασιμότητα Ιστοσελίδων

- *Clear and Readable Fonts*
- Sufficient Contrast
- Descriptive Image Titles & Alternative Texts
- Video Captions & Transcripts
- Minimal Page Design – Avoid Distractions

# DIGITAL INCLUSION

## INTERNET ACCESSIBILITY



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Πρότυπο Προσβασιμότητας Ιστοσελίδων

WCAG 2.0 Level AA



# DIGITAL INCLUSION

## VIDEO GAMES ACCESSIBILITY



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Source

# DIGITAL INCLUSION

## VIDEO GAMES ACCESSIBILITY



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Source

# DIGITAL LITERACY

## What is it?



Digital literacy refers to the ability to *find, evaluate, and utilize* digital information *effectively and critically*.

It encompasses a range of skills and competencies that enable individuals to navigate and engage with digital technologies, including computers, the internet, mobile devices, and digital platforms.

# DIGITAL LITERACY



- How skilled people are at finding information?
- How effectively can they find help in solving problems they encounter in their efforts to do so?
- How productively they use the internet to enhance their economic life chances and capacity for social and political participation?

# DIGITAL LITERACY



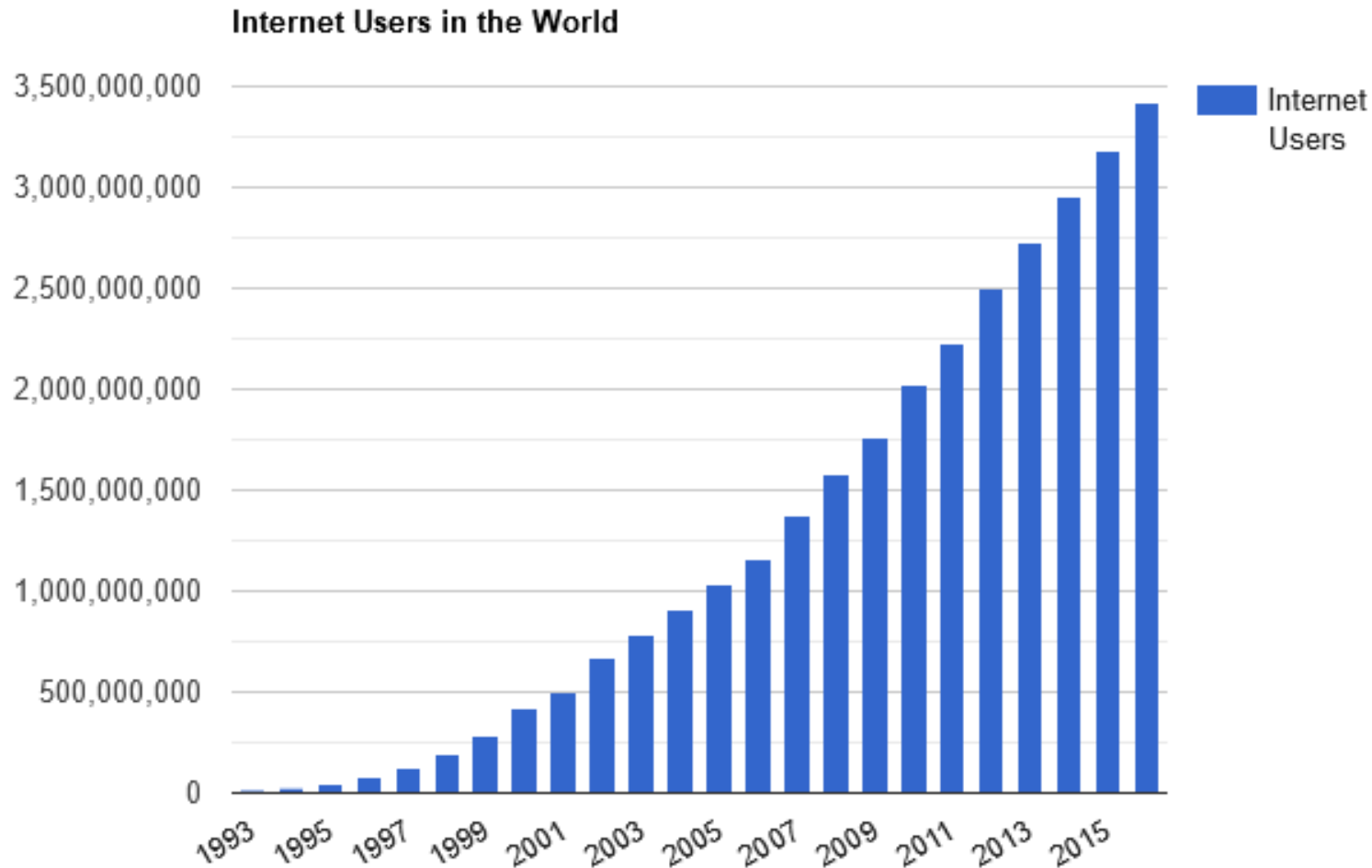
Are someone's skills related to personal characteristics?

A few researchers have examined self-reports of skill and found that users with less formal education are less confident in their abilities.

(Bonfadelli 2002)

# Digital Inclusion

Internet Users  
In the World



Source: <https://www.internetlivestats.com/internet-users/>

Year	Internet Users**	Penetration (% of Pop)	World Population	Non-Users (Internetless)	1Y User Change	1Y User Change	World Pop. Change
2016*	<b>3,424,971,237</b>	46.1 %	7,432,663,275	4,007,692,038	7.5 %	238,975,082	1.13 %
2015*	<b>3,185,996,155</b>	43.4 %	7,349,472,099	4,163,475,944	7.8 %	229,610,586	1.15 %
2014	<b>2,956,385,569</b>	40.7 %	7,265,785,946	4,309,400,377	8.4 %	227,957,462	1.17 %
2013	<b>2,728,428,107</b>	38 %	7,181,715,139	4,453,287,032	9.4 %	233,691,859	1.19 %
2012	<b>2,494,736,248</b>	35.1 %	7,097,500,453	4,602,764,205	11.8 %	262,778,889	1.2 %
2011	<b>2,231,957,359</b>	31.8 %	7,013,427,052	4,781,469,693	10.3 %	208,754,385	1.21 %
2010	<b>2,023,202,974</b>	29.2 %	6,929,725,043	4,906,522,069	14.5 %	256,799,160	1.22 %
2009	<b>1,766,403,814</b>	25.8 %	6,846,479,521	5,080,075,707	12.1 %	191,336,294	1.22 %
2008	<b>1,575,067,520</b>	23.3 %	6,763,732,879	5,188,665,359	14.7 %	201,840,532	1.23 %
2007	<b>1,373,226,988</b>	20.6 %	6,681,607,320	5,308,380,332	18.1 %	210,310,170	1.23 %
2006	<b>1,162,916,818</b>	17.6 %	6,600,220,247	5,437,303,429	12.9 %	132,815,529	1.24 %
2005	<b>1,030,101,289</b>	15.8 %	6,519,635,850	5,489,534,561	12.8 %	116,773,518	1.24 %
2004	<b>913,327,771</b>	14.2 %	6,439,842,408	5,526,514,637	16.9 %	131,891,788	1.24 %
2003	<b>781,435,983</b>	12.3 %	6,360,764,684	5,579,328,701	17.5 %	116,370,969	1.25 %
2002	<b>665,065,014</b>	10.6 %	6,282,301,767	5,617,236,753	32.4 %	162,772,769	1.26 %
2001	<b>502,292,245</b>	8.1 %	6,204,310,739	5,702,018,494	21.1 %	87,497,288	1.27 %
2000	<b>414,794,957</b>	6.8 %	6,126,622,121	5,711,827,164	47.3 %	133,257,305	1.28 %

Source: <https://www.internetlivestats.com/internet-users/>

# Digital Inclusion

## Internet Users In the World

# DIGITAL INCLUSION TIPPING POINTS



Adoption of services such as:

- Email
- Forums
- AR
- Social Media
- Video Calls
- E-Learning



# DIGITAL INCLUSION COST



How much does internet cost? Is it cheaper or more expensive than other media?

- Cost of having internet access
- Cost of device
- Cost of access on specific websites/services (e.g., social media, online newspapers,...)

# DIGITAL INCLUSION COST



Information on the internet is mainly free or at least less expensive than other *inexpensive* media like newspapers.

Is this always the case?

What about the ads we can't avoid? How is this cost calculated?



# Dark Web

Source:  
[www.socinvestigation.com](http://www.socinvestigation.com)

# INTERNET DARK WEB



## What is it?

The dark web refers to a part of the internet that is not indexed by traditional search engines and requires specific software or configurations to access.

One of the key characteristics of the dark web is the use of encryption and anonymity tools such as Tor (The Onion Router). These tools route internet traffic through a network of volunteer-operated servers, concealing the user's IP address and making it difficult to trace their online activities.

# INTERNET DARK WEB



- It mainly consists of websites that are intentionally hidden. These are accessible through special software (e.g., Tor browser). They often have *.onion* as Top Level Domain.
- Illegal activities: illegal marketplaces, drug & gun trafficking, hacking forums, stolen credit cards and user accounts on online services,...
- It can also serve as a platform for privacy-conscious individuals, journalists, and whistleblowers to share information and communicate securely. It can provide an avenue for free expression and protect individuals in repressive regimes.

# INTERNET DARK WEB



Are there any risks involved in using the dark web?

- Exposure to illegal content, scams, and malware.
- Psychological burden

# INTERNET DARK WEB



## Ethical Considerations

- Privacy vs. Security
- Freedom of Expression vs. Illegal Activities
- Law Enforcement and Surveillance
- Cybersecurity and Responsible Use

# DATA PRIVACY INTRODUCTION



## What is Data Privacy?

Data privacy refers to the right of individuals to control the *collection*, *use*, and *sharing* of their personal data. It involves protecting sensitive information from unauthorized access, ensuring confidentiality, and maintaining individuals' autonomy over their own data.



# DATA PRIVACY INTRODUCTION



## What is the importance of Data Privacy?

With the increasing digitization of personal information and the interconnectedness of online platforms, data privacy has become crucial. It safeguards individuals' rights, fosters trust in digital services, and mitigates the risks of data misuse, identity theft, and surveillance.

# DATA PRIVACY INTRODUCTION



## What Personal Data consists of?

Personal data is a valuable asset that fuels various aspects of the digital ecosystem, including targeted advertising, data-driven decision-making, and personalized user experiences. However, it also raises concerns about privacy infringement and potential misuse if not adequately protected.

# DATA PRIVACY RISK AND CHALLENGES



## Data Breaches and Cyber Attacks

Organizations storing personal data are vulnerable to data breaches and cyberattacks, resulting in the unauthorized access and potential exposure of sensitive information. This can lead to identity theft, financial loss, or reputational damage.

# DATA PRIVACY RISK AND CHALLENGES



## Unauthorized Data Collection and Tracking

Many online services collect user data without explicit consent. This can lead to the creation of detailed user profiles and targeted advertising, raising concerns about user privacy and autonomy.

# DATA PRIVACY RISK AND CHALLENGES



## Profiling and Targeted Advertising

The extensive collection and analysis of personal data enable profiling and targeted advertising, where individuals are categorized and exposed to personalized content. While this can enhance user experiences, it also raises questions about privacy, manipulation, and the potential for discriminatory practices.

# DATA PRIVACY RISK AND CHALLENGES



## Government Surveillance and Data Retention

Governments may engage in mass surveillance programs or request access to individuals' personal data for national security or law enforcement purposes.

# DATA PRIVACY

## PRIVACY REGULATIONS



### General Data Protection Regulation (GDPR)

The GDPR is a comprehensive data protection regulation implemented by the European Union (EU) to enhance privacy rights and protect personal data. It applies to all EU member states and regulates the collection, processing, storage, and transfer of personal data.

The GDPR is built upon several fundamental principles, such as data minimization, purpose limitation, transparency, accountability, and individuals' rights to access, rectify, and erase their personal data.

Organizations processing personal data must adhere to various obligations, including obtaining valid consent, implementing adequate security measures, conducting privacy impact assessments, and appointing a Data Protection Officer (DPO) in certain cases.

# DATA PRIVACY

## BEST PRACTICES FOR INDIVIDUAL



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- Strong Passwords
- Two-Factor Authentication (2FA)
- Secure Internet Connections / VPN
- Review privacy settings
- Limit mobile app permissions
- Data backups and Encryption
- Recognize Phishing and Scam