

# Digital Society & You

## Navigating the Societal Impact of Digital Technology

We have transitioned from a world of physical letters to instantaneous global communication. From banking to aviation, every sphere of human activity is now driven by digital technology. This deck serves as your code of conduct for the digital age.



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# The Double-Edged Sword of Digital Progress

The Past: Physical & Slow



Manual delivery.  
Days to respond.  
Physical constraints.

The Present: Digital & Instant



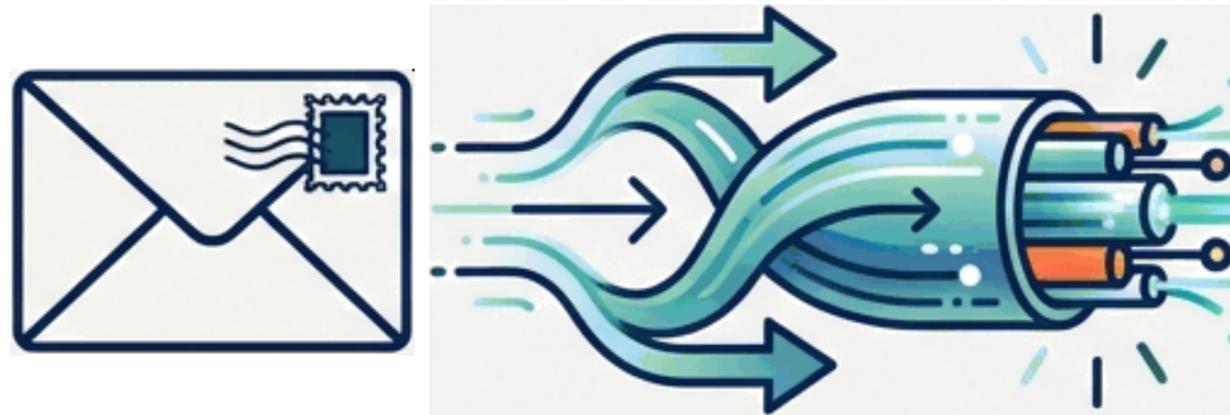
Instant broadcast.  
Microsecond response.  
Democratized access.

The Warning: While we reap the benefits of efficiency, these technologies are prone to misuse. Safety requires understanding.

# The Double-Edged Sword of Digital Reliance

## The Shift: Convenience

The transition from physical to digital has maximized efficiency. Emails replace letters; global broadcasts replace individual copies. We are connected, productive, and instant.

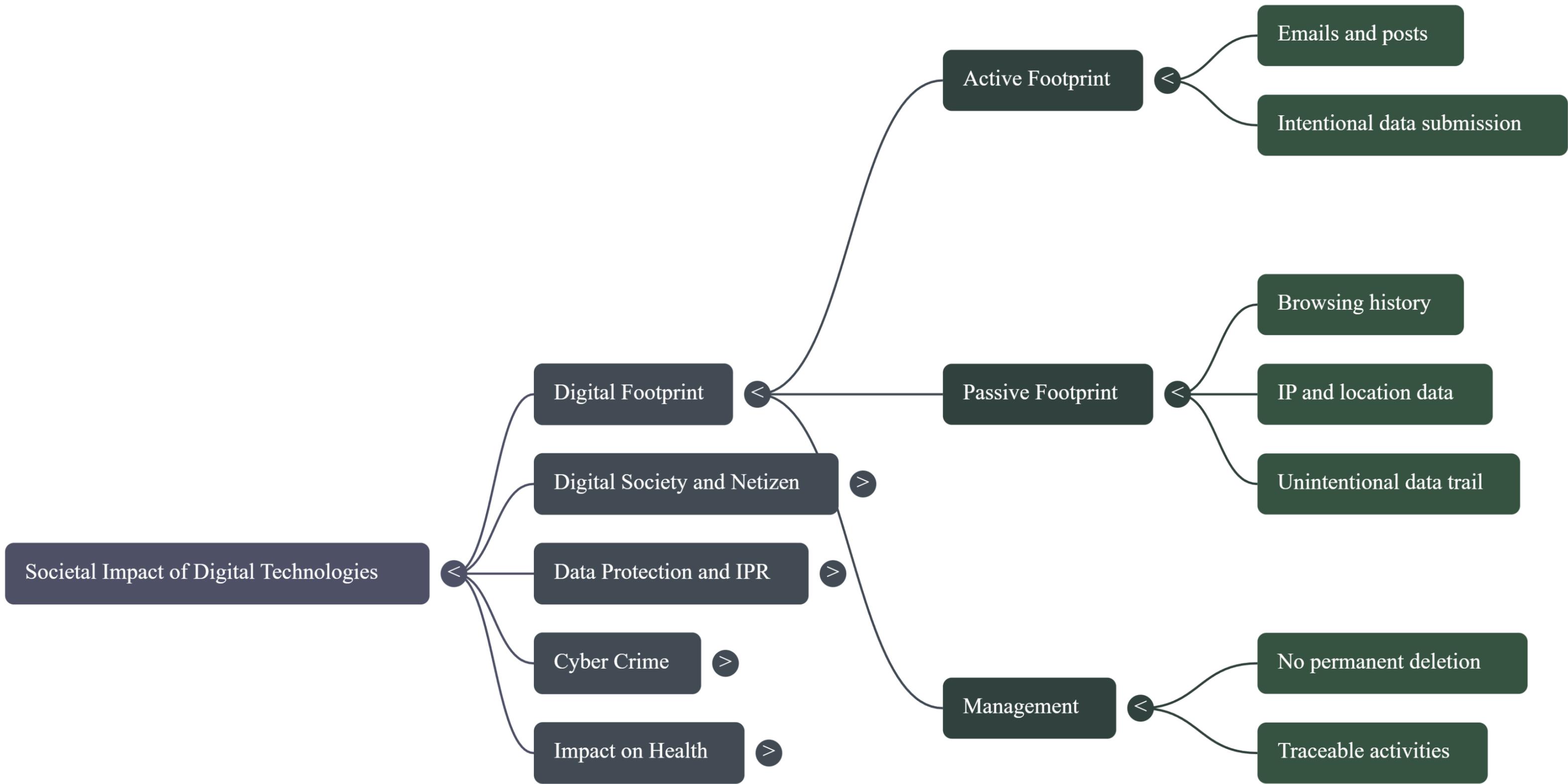


## The Risk: Vulnerability

While we reap the benefits of high-speed internet, these technologies carry the risk of misuse. A safe digital environment requires more than connectivity—it requires awareness.



**Key Insight:** Technology is a tool. Its impact depends on the user's intent.



# Are You Being Followed (By Your Own Data)

## What is a Digital Footprint?

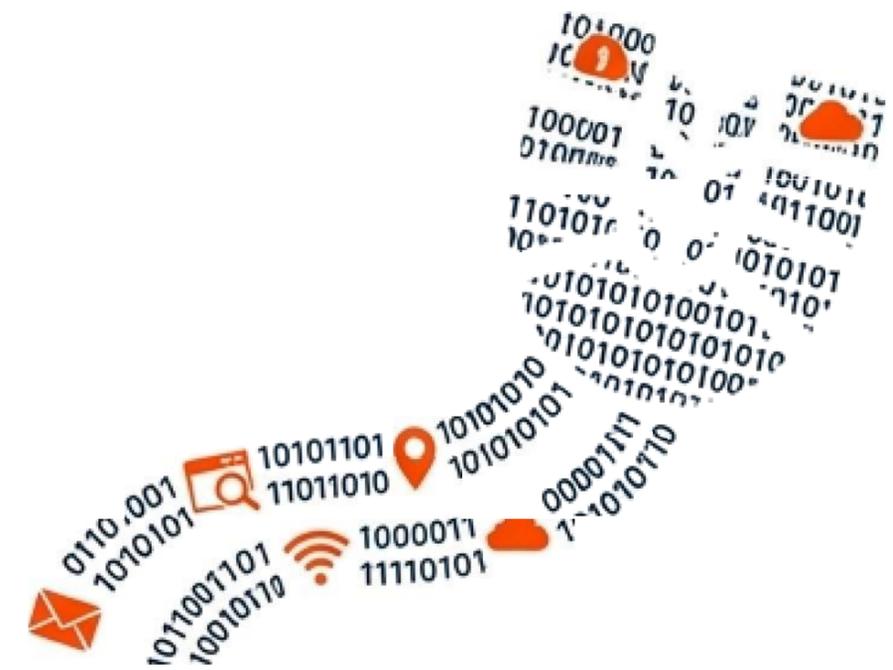
The trail of data reflecting your online activities. It includes websites visited, emails sent, and device specifics like IP address and location.

### Active Footprints

Data intentionally submitted (emails, posts, app responses).

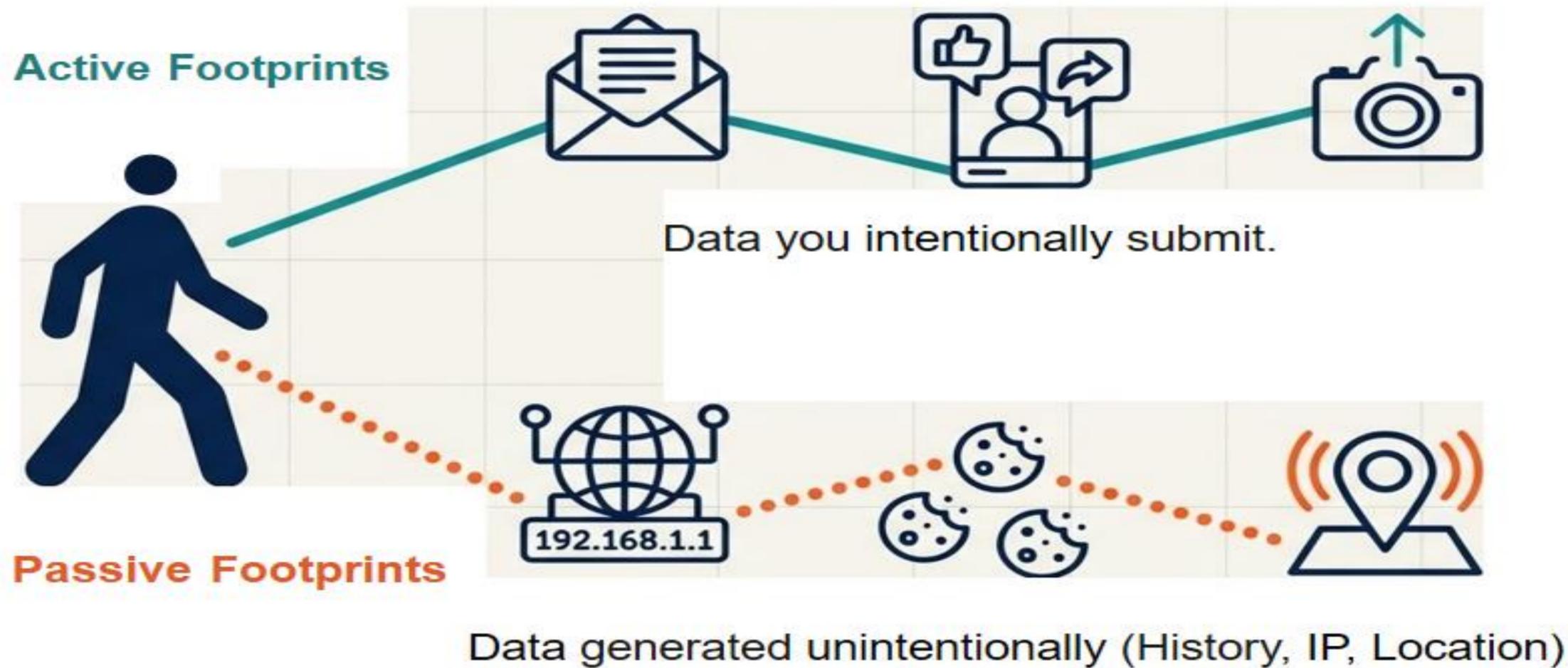
### Passive Footprints

Data generated unintentionally (browsing history, cookies, auto-fills).



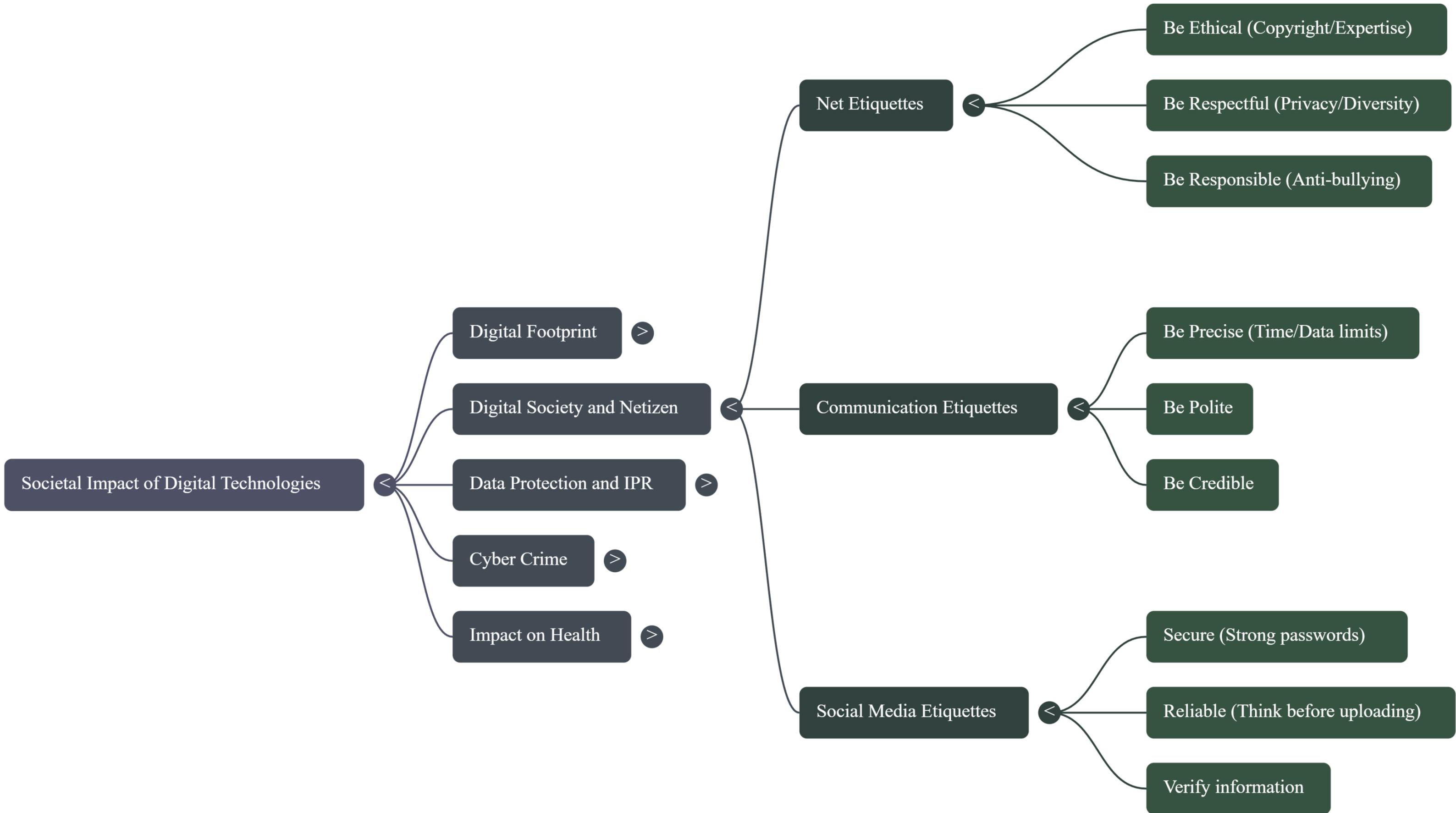
*“Can your digital footprints be used to judge your attitude and work ethics?”*

# Your Digital Footprint: The Trail That Never Fades



## The Reality:

- Data is stored on servers you cannot access.
- Deleting locally does not erase the footprint.
- This trail shapes your online reputation.



# The Code of the Netizen

## Three Pillars of Digital Citizenship



### 01. Be Ethical

No copyright violations.  
Share expertise only when accurate. Do not stream or download pirated content.



### 02. Be Respectful

Respect privacy boundaries.  
Do not share private files without consent.  
Acknowledge cultural diversity.



### 03. Be Responsible

Zero tolerance for Cyber Bullying. Follow the 'Don't Feed the Troll' rule—ignore discord sown for amusement.

# The Code of the Netizen

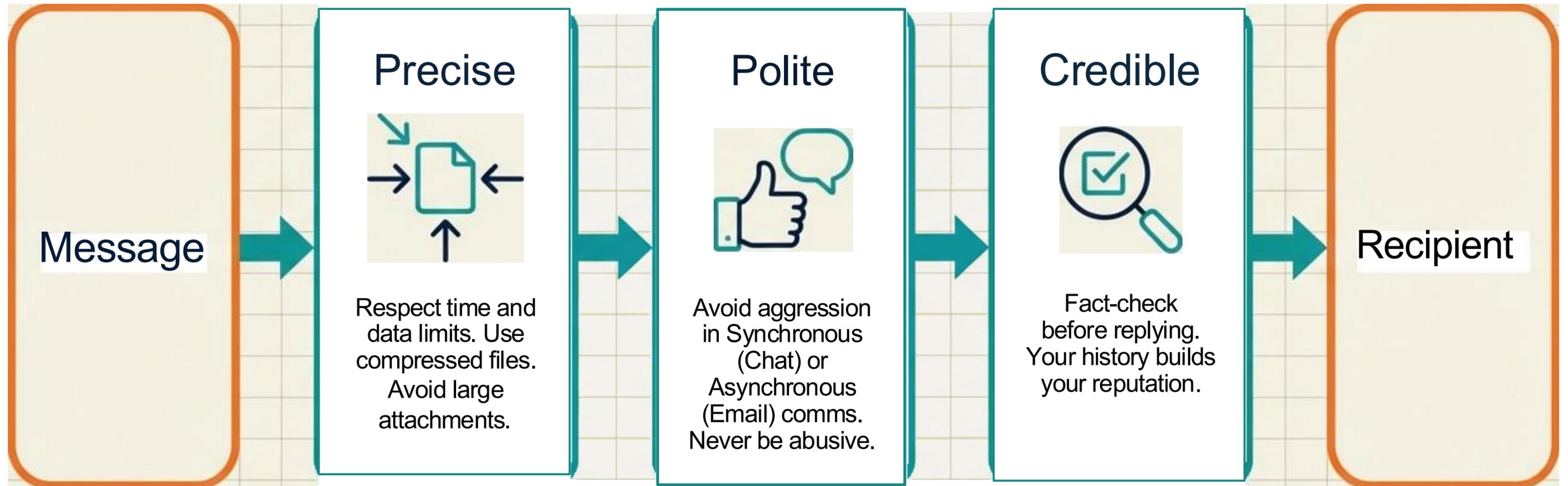
Net Etiquette for the Digital Citizen



## **The Golden Rule: Don't Feed the Troll.**

Trolls sow discord for amusement. The only defense is to ignore them completely.

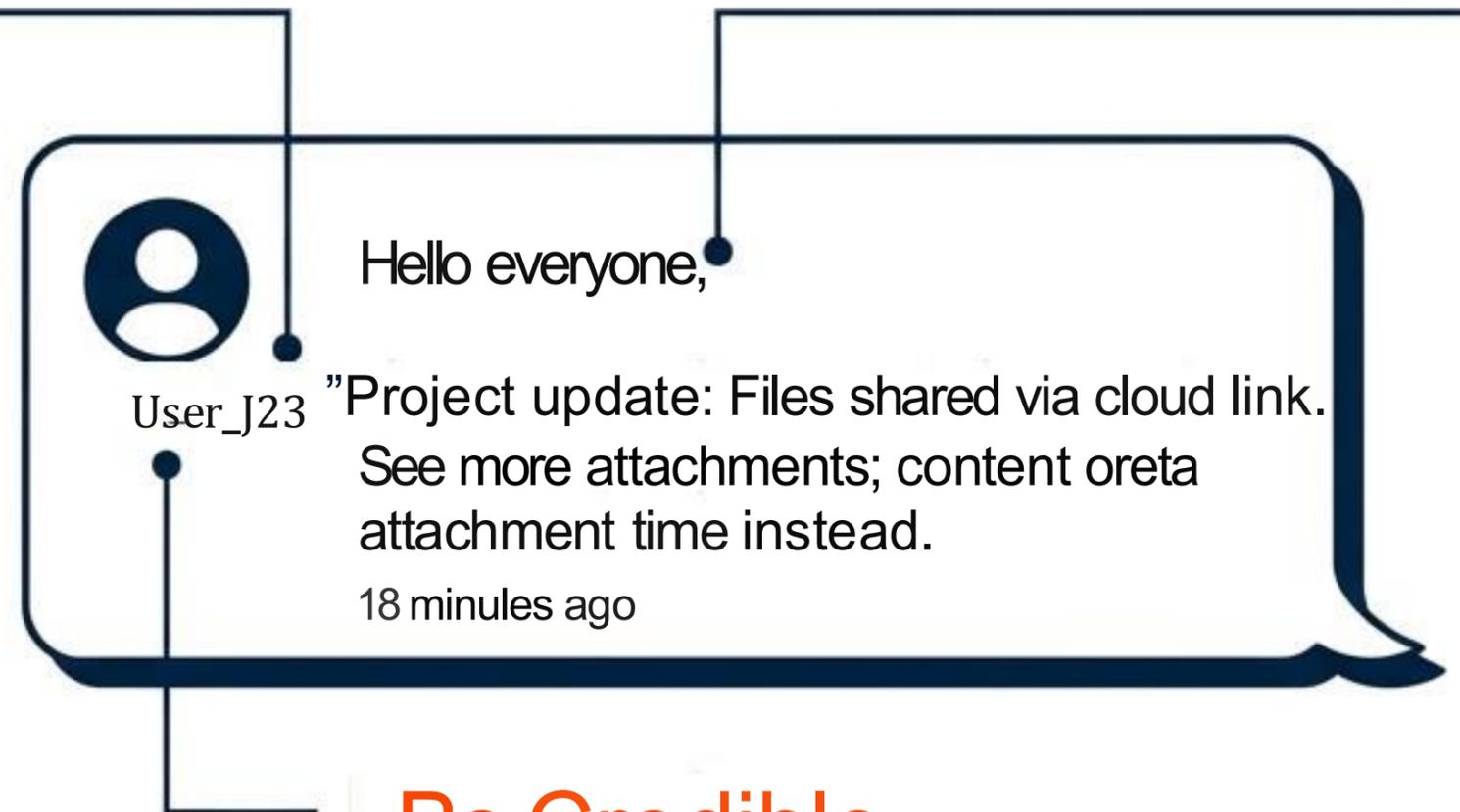
# Protocols for Digital Communication



# Protocols for Digital Communication

## Be Precise

Respect time and data limits. Avoid large attachments; use cloud links instead.



## Be Polite

Whether synchronous (chat) or asynchronous (email), avoid aggressive language.

## Be Credible

Your comments build your reputation. People judge credibility by past activity.

**CRITICAL: NO PERMANENT DELETION. DELETING A POST DOES NOT REMOVE IT FROM SERVER RECORDS. THIS DATA TRACE IS USED TO APPREHEND HATE SPEECH CULPRITS.**

# Operating Safely on Social Media



## Security Protocol

Change passwords frequently.  
Never share credentials. Use  
strong combinations.



## Verify Connections

Know who you befriend.  
Strangers may mask malicious  
intentions.

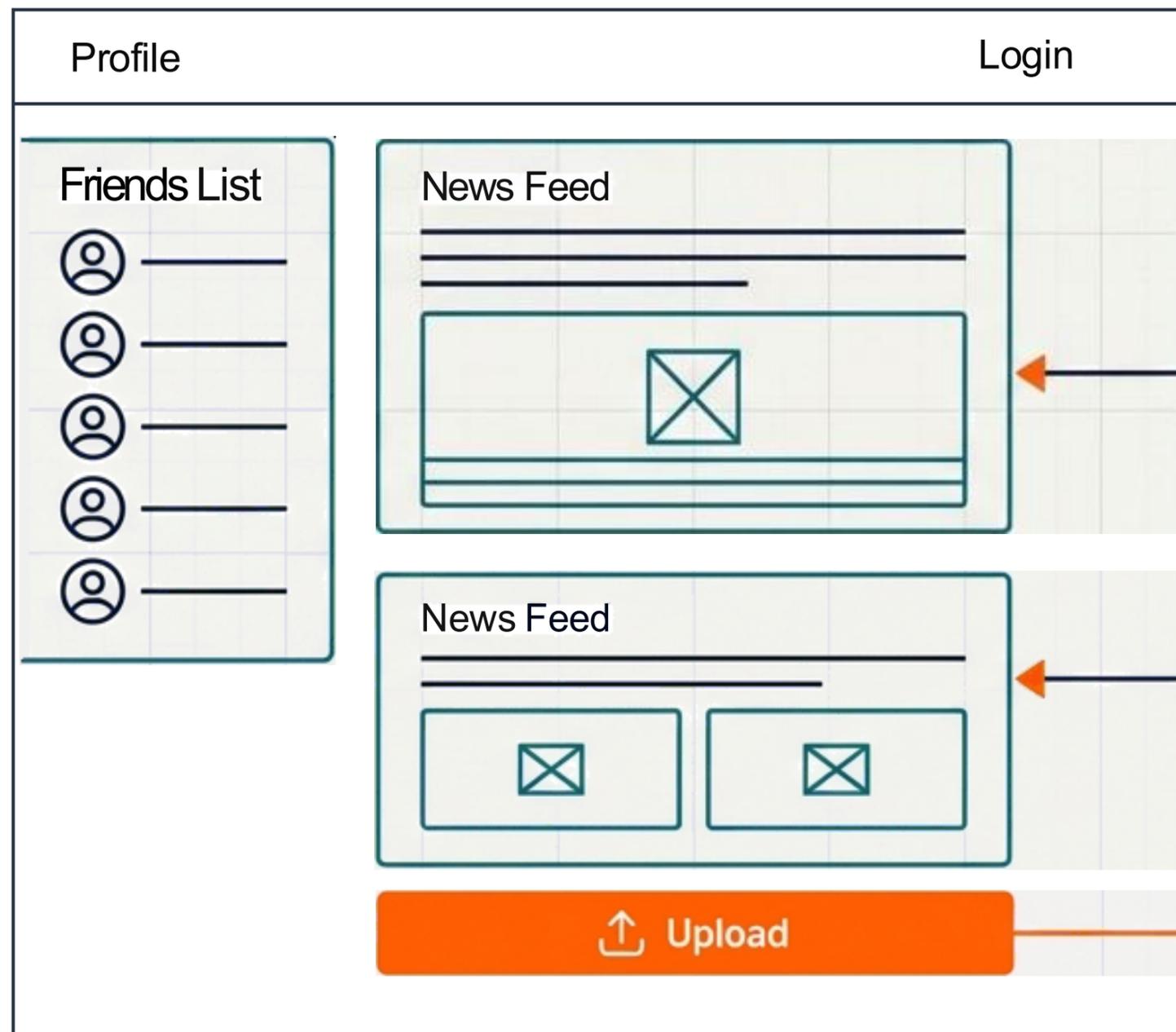


## Information Integrity

Beware of fake news.  
Validate before sharing.

**GOLDEN RULE: Think Before You Upload.  
Once on a remote server, it is there forever.**

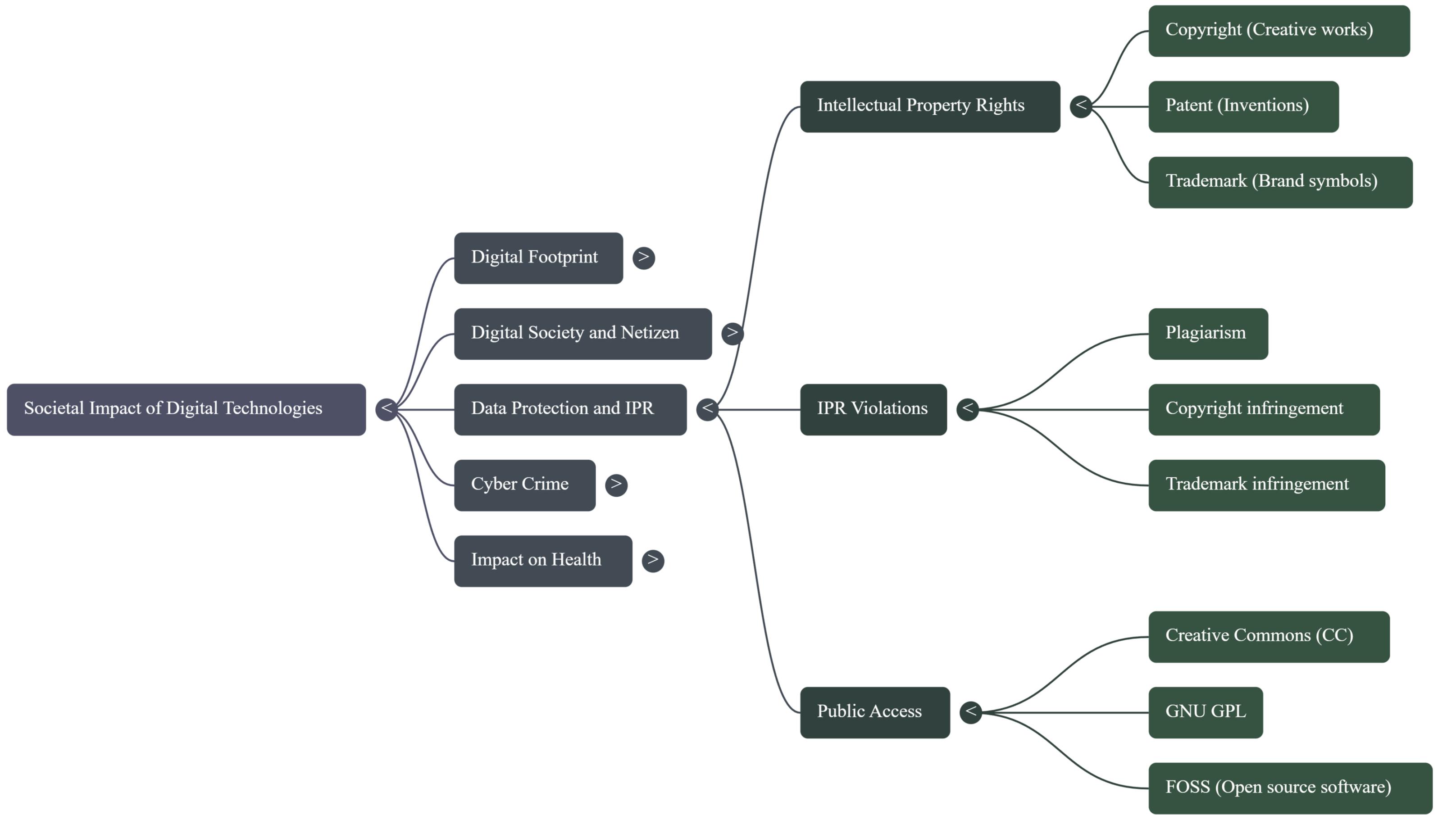
# Navigating the Social Media Landscape



## Hygiene Rules

Essential practices for safe online presence.

- Be Secure:** Change passwords frequently. Never share credentials.
- Friendships:** Know who you befriend. Strangers may have malicious intentions.
- Be Reliable:** Verify news before sharing. Stop the spread of fake news.
- The Upload Rule:** Think before you upload. Once on a server, it is permanently out of your control.



Societal Impact of Digital Technologies

Digital Footprint

Digital Society and Netizen

Data Protection and IPR

Cyber Crime

Impact on Health

IPR Violations

Intellectual Property Rights

Copyright (Creative works)

Patent (Inventions)

Trademark (Brand symbols)

Plagiarism

Copyright infringement

Trademark infringement

Creative Commons (CC)

GNU GPL

FOSS (Open source software)

# Protecting the Intangible: Data & IPR

## What is Intellectual Property (IP)?

Just as you own physical property (a house, a car), you own your ideas. IP refers to inventions, artistic expressions, designs, symbols, and names.



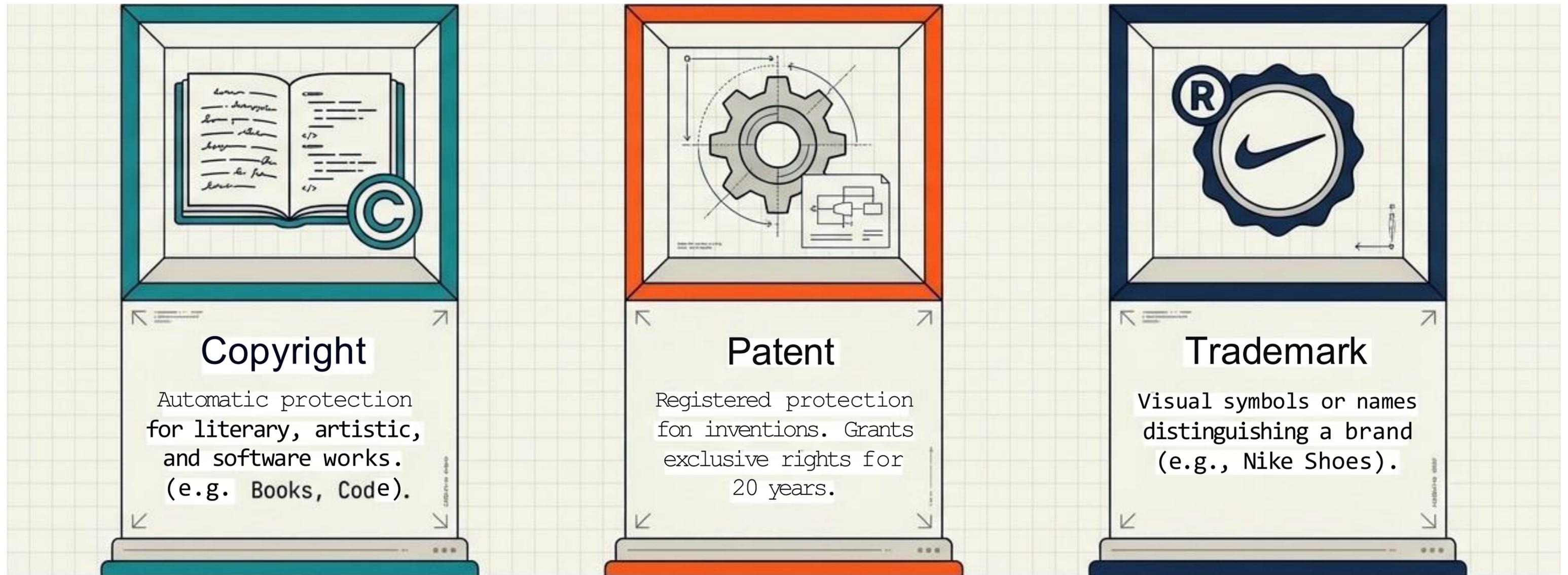
## Data Protection

Securing 'Sensitive Data' (Biometrics, Health, Finance) via encryption to prevent prevent harm, embarrassment, and unfairness.

**Goal:** IPR allows creators to earn recognition and financial benefit, fostering innovation.

# Respecting the Ownership of Ideas (IPR)

Intellectual Property Rights allow creators to earn recognition and financial benefit from their work.



# The Trinity of Ownership



## COPYRIGHT

Protects: Literary/Artistic works (Books, Code, Music).

Rights: Automatic exclusive right to copy, distribute, and display.

Example: Rudyard Kipling's "The Jungle Book".



## PATENT

Protects: Inventions and functional expressions.

Rights: Must apply. Grants 20 years of exclusive control.

Goal: Encourages sharing scientific findings.



## TRADEMARK

Protects: Visual symbols, names, logos distinguishing a brand.

Rights: Prevents confusingly similar marks.

Example: Nike logo vs. "Nikke".

# Infringement vs. Plagiarism



## Trademark Infringement

Unauthorized use of a brand's logo or name.

Remember: Just because it is on the Internet, does not mean that is free for use

# The Fine Line: Plagiarism vs. Infringement

## Plagiarism

The Ethical Offense



Stealing CREDIT.

Presenting someone else's idea as your own.  
(e.g., Copying text without citation).

## Copyright Infringement

The Legal Offense



Stealing PROPERTY.

Using copyrighted work without permission or payment.  
(e. g., Downloading paid images for free).

Both are violations of a Netizen's code.

# The Open Source Alternative

Public licenses that encourage collaboration.



**Creative Commons (CC):**  
For creative works (music, literature). Allows free distribution and modification under the author's specific conditions.



**GNU GPL & FOSS:**  
For software. Guarantees the freedom to run, study, share, and modify code (e.g., Ubuntu, Firefox).

**FOSS (Free and Open Source Software)** vs. **Freeware**: Freeware (like Skype) is free to use but the source code is hidden. FOSS allows you to change the code.

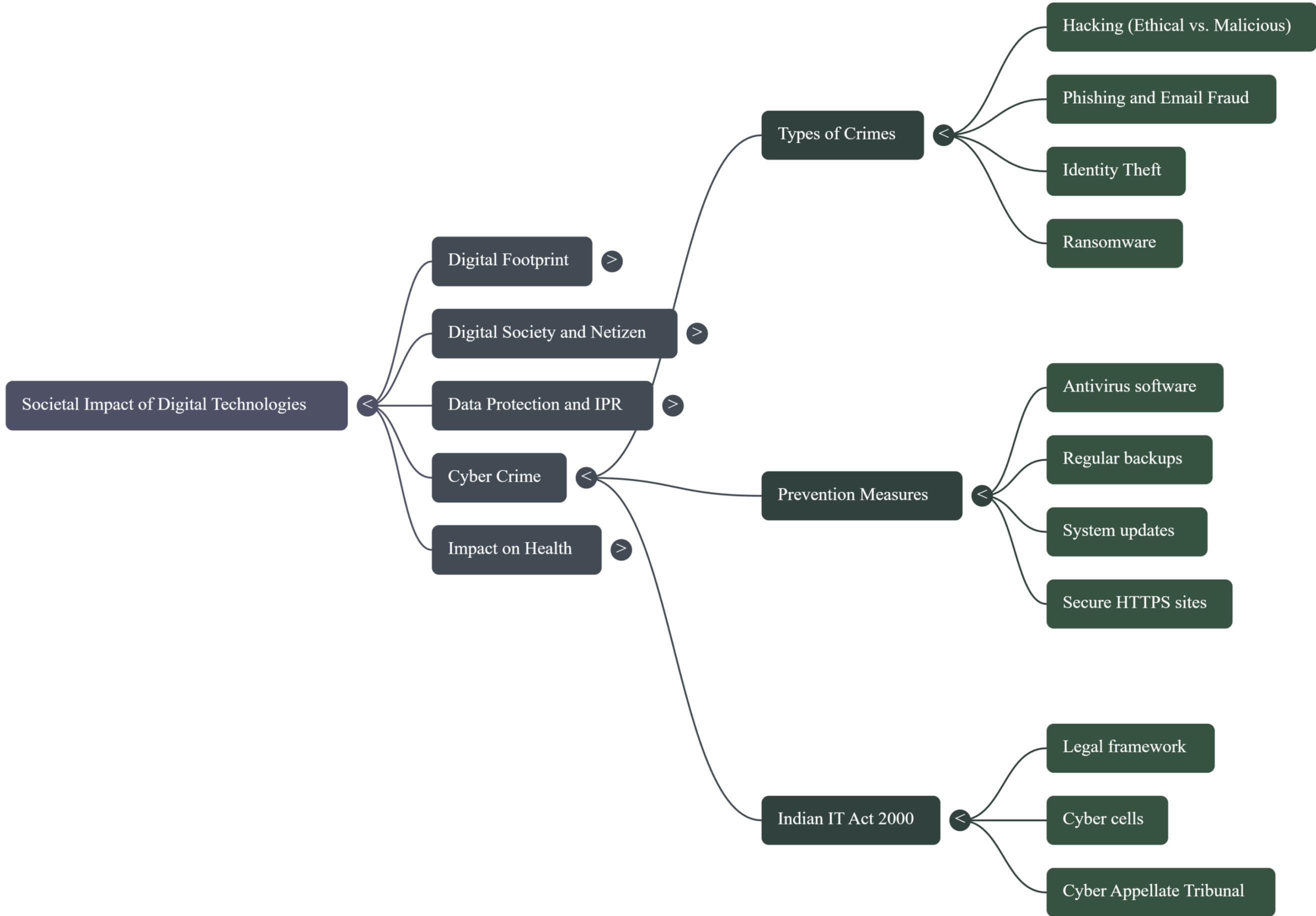
# The Power of Open Source

Collaboration Drives Innovation



- Public Access: Restrictions can hinder progress. Licenses provide rules for sharing.
- GNU GPL: **GNU** For Software. Run, study, share, and modify code (e.g., Linux, Firefox).
- Creative Commons (CC):  For Creative Works. Free distribution under author conditions.

**Warning: Software Piracy (unauthorized use) harms the economy and degrades system performance.**

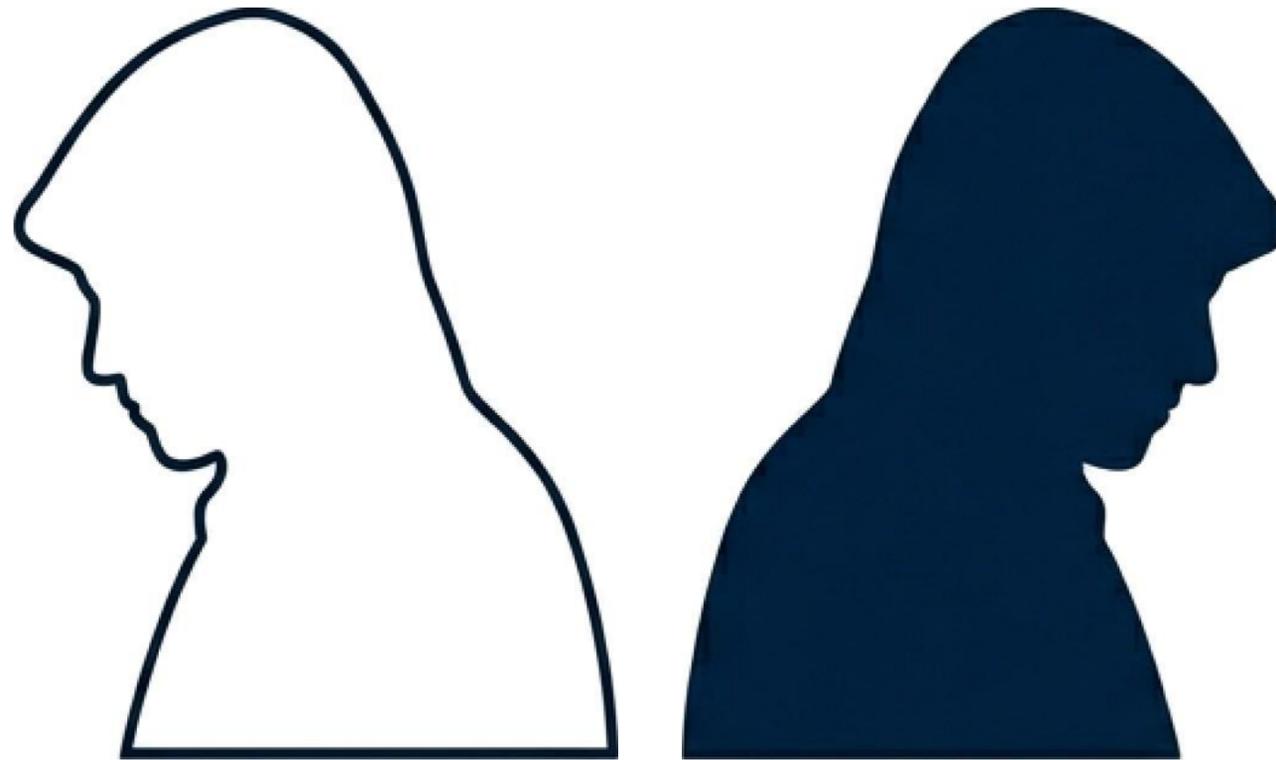


# The Threat Landscape: Cyber Crime

Criminal activities where the computer is the Target or the Tool.

## White Hat Hacker (Ethical)

Finds loopholes to fix security.  
Reports vulnerabilities to owners.



## Black Hat Hacker (Cracker)

Exploits vulnerabilities for theft, damage, or espionage.

## Common Attack Vectors

1. **Virus** (Self-replicating malicious code)

2. **Malware** (Unauthorized access software)

3. **Denial-of-Service** (Crashing a network)

# The Threat Landscape: Cyber Crime

The Computer as Target and Weapon

## Threat Matrix



### Hacking

- Unauthorized access.
- + White Hat: Ethical hackers fixing security.
- + Black Hat: Criminals stealing data.



### Phishing

Deceptive emails (Spoofing) designed to steal credentials using fake banking logos.



### Ransomware

Malware that encrypts data and demands payment for access.

# Deception and Extortion



**Phishing & Identity Theft:** Stealing credentials (PAN, Passport) for financial or medical fraud.



**Ransomware:** Malware that blocks access to data until a ransom is paid. Often enters via spam or malicious ads.

# Fortifying Your Digital Defense

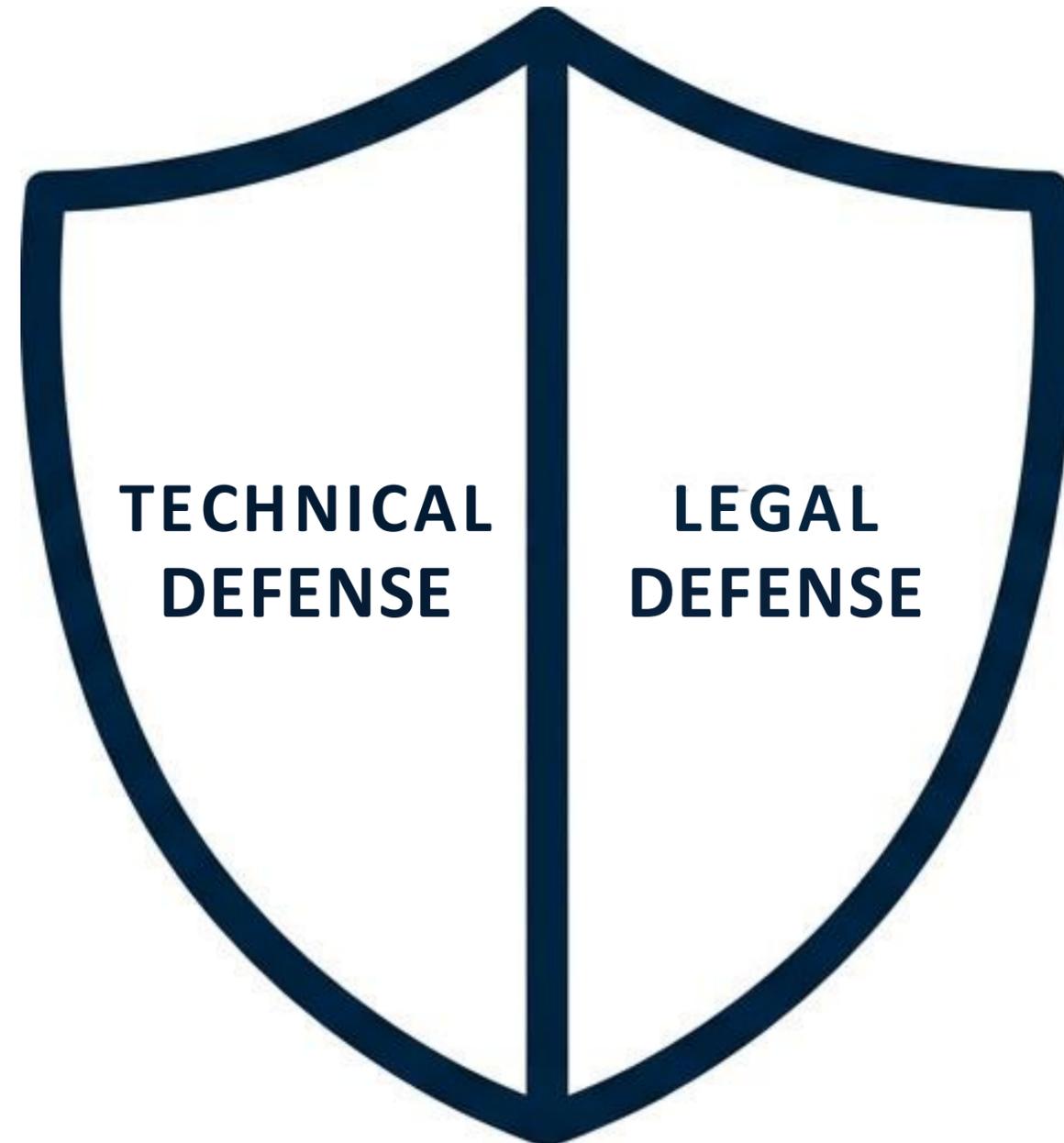
## Building Resilient Cybersecurity Layers



- ❖ Data Hygiene: Regular backups of important data.
- ❖ Software Security: Updated Antivirus. HTTPS sites only.
- ❖ Network Security: Strong Wi-Fi passwords. No cookies on unknown sites.
- ❖ Password Rules: Complex alphanumeric + special chars. No common names.
- ❖ Vigilance: Never open attachments from untrusted sources.

# The Shield: Prevention & Law

- Regular Data Backups
- Use HTTPS & Update Antivirus
- Disable **Save Password** on public PCs
- Do not accept cookies blindly



- **Indian IT Act** (2000/2008): Framework for e-governance.
- **Cyber Appellate Tribunal:** Resolves disputes.
- **Cyber Cells:** Police units for reporting complaints.

# The Legal Framework: Indian IT Act



The Act:  
IT Act 2000  
(Amended 2008).



Enforcement:  
- Cyber Appellate Tribunal (Dispute resolution)  
- Cyber Cells (Police stations)

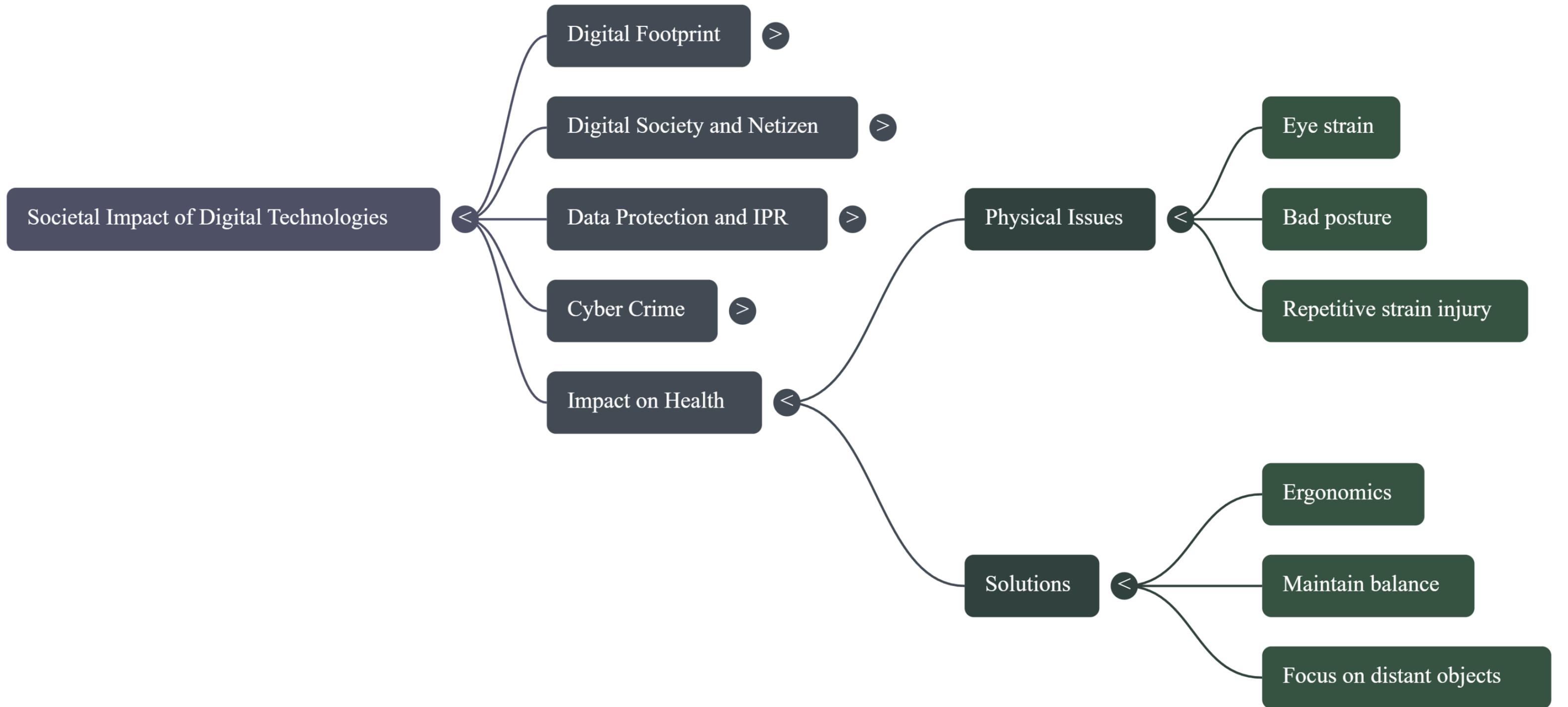


Purpose:  
Regulates data processing, digital signatures, and electronic records.



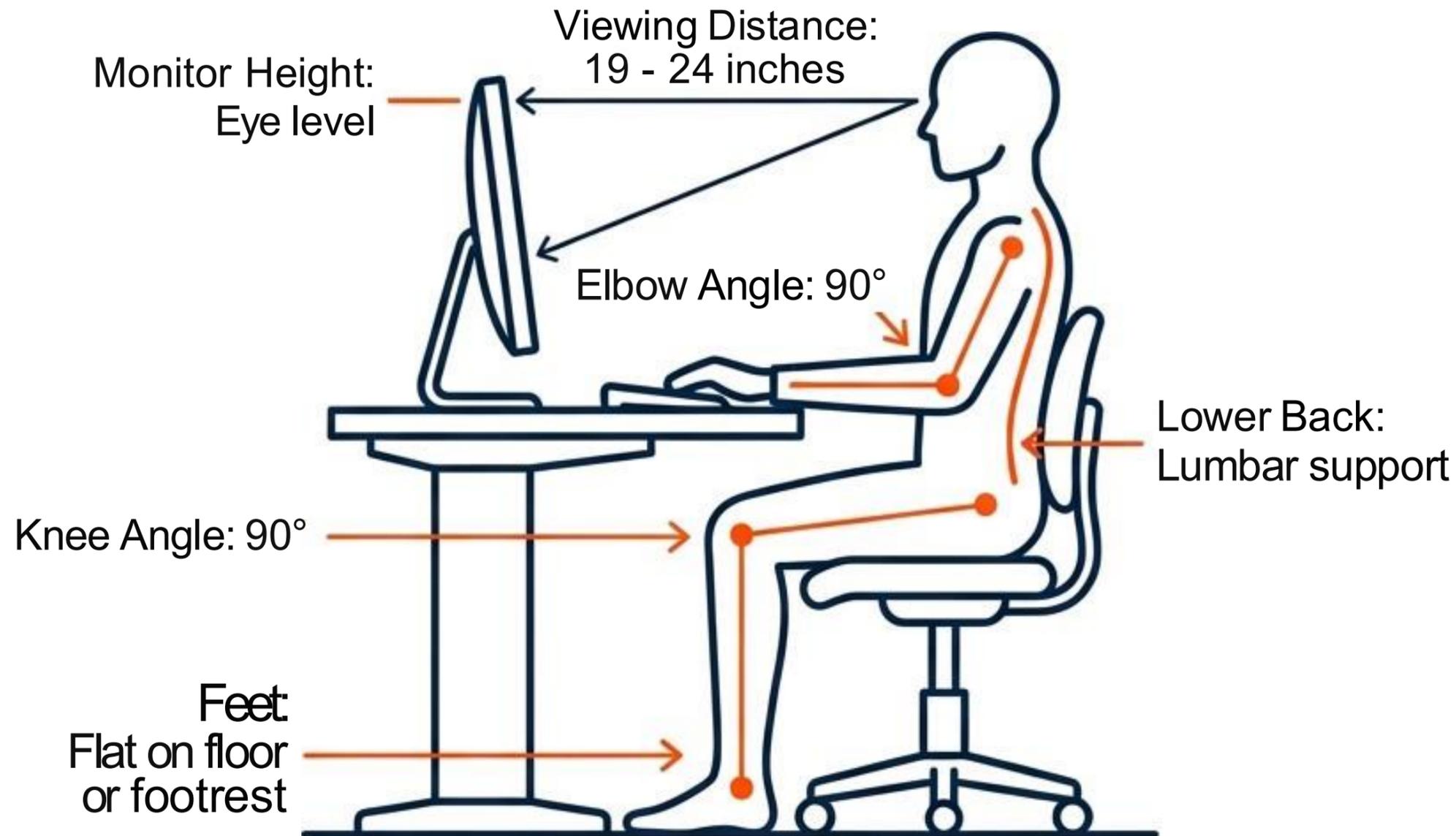
Scope:  
Covers hacking, data tampering, identity theft, and privacy violations.





# The Physical Cost of Digital Life

## Ergonomics & Wellness



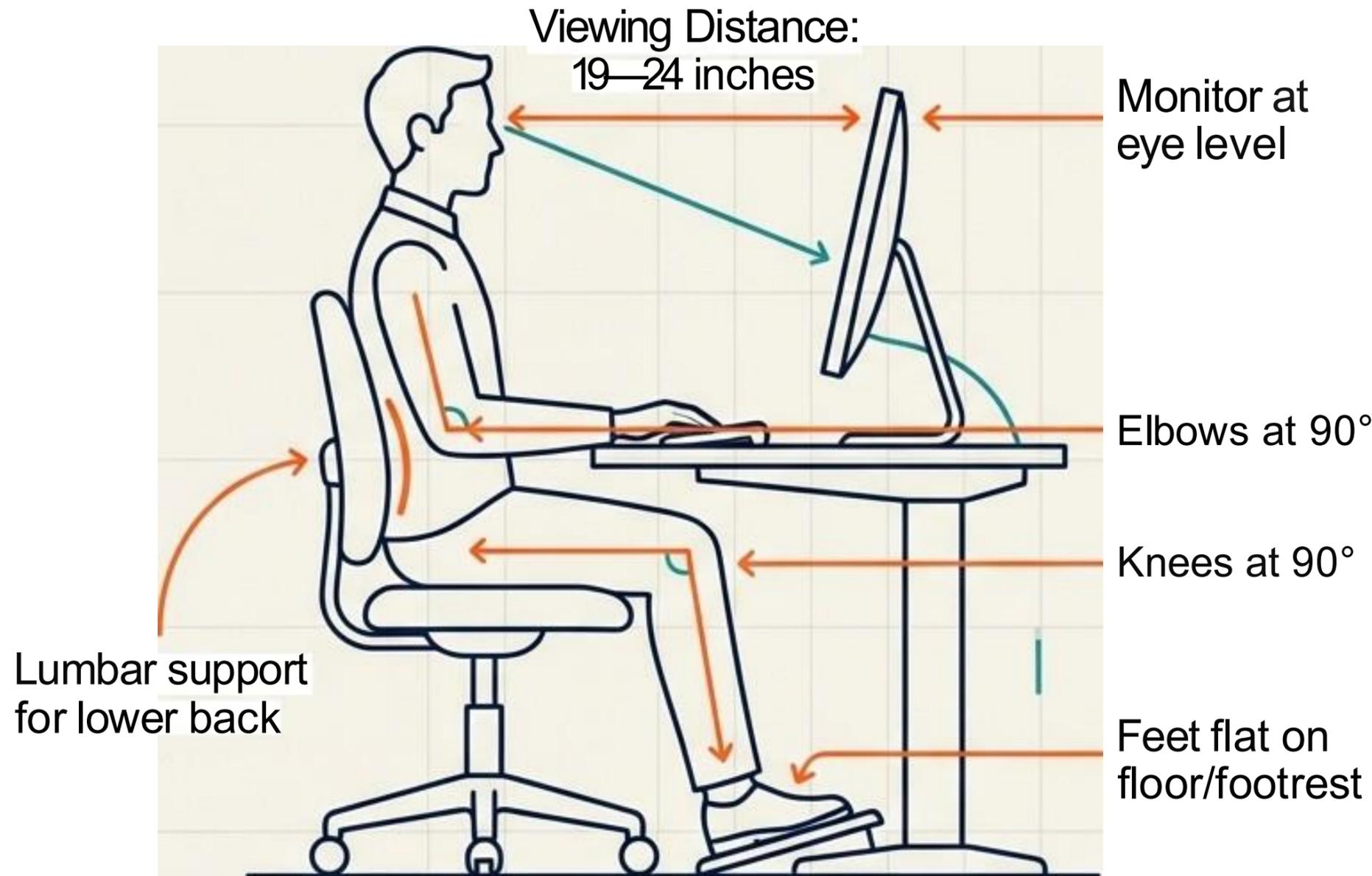
### The Risk:

Prolonged screen time leads to physical fatigue, eye strain, and 'tech addiction'.

The solution is **conscious Ergonomics.**

# Digital Wellness & Ergonomics

## Sustainable Tech Usage



## Health Risks

-  Eye Strain
-  Repetitive Strain Injury (RSI)
-  Tech Neck
-  Mental Fatigue.

# Manifesto for the Digital Citizen

## TRACE

Awareness of  
Active & Passive  
Footprints

## RESPECT

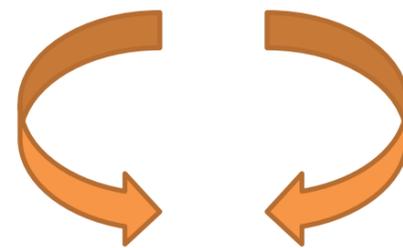
Adherence to  
Net Etiquette  
& IPR

## PROTECT

Data security &  
Cyber Crime  
vigilance

## THRIVE

Physical health  
& Ergonomics



Online friends are good, but spending time  
with friends in real life is very fulfilling.

# The Responsible Netizen's Summary

## Your Pledge for the Digital World

- ✓ Manage your footprint: **Deletion** is never permanent.
- ✓ Interaction: Be precise, polite, and credible.
- ✓ Ownership: Respect IPR. Embrace **Open Source**, reject piracy.
- ✓ Security: Use backups, strong passwords, and vigilance.
- ✓ Wellness: Maintain correct posture and balance screen time.

Topic	Key Concepts	Description	Risks or Impacts
Digital Footprints	Active Digital Footprints	Data that a user intentionally submits online, such as emails written or posts made on social media.	Can be used to judge attitude and work ethics; data trails are permanent and can be used for targeted advertisement or exploitation.
Digital Footprints	Passive Digital Footprints	Digital data trail left online unintentionally, such as browsing history, cookies, and IP addresses generated while visiting websites.	Allows tracing of user location and device details; potential for data misuse by third-party servers.
Net Etiquettes	Cyber Bullying	Insulting, degrading, or intimidating online behavior such as repeated threats or posting private information to ridicule a victim.	Serious psychological implications for the victim; actions can be traced back to the culprit via digital footprints.
Net Etiquettes	Internet Troll	A person who deliberately sows discord by starting quarrels or posting inflammatory messages for amusement.	Disrupts online communities and upsets people.
IPR	Plagiarism	Presenting someone else's idea or work as one's own without mentioning the original creator or source.	Serious ethical offense; considered an act of fraud.
IPR	Copyright Infringement	Using another person's copyrighted work without obtaining permission or paying for it.	Legal proceedings and violation of creator rights.
Cyber Crime	Hacking	The act of unauthorized access to a computer, network, or digital system by exploiting vulnerabilities.	Identity theft, monetary gain, leaking sensitive information, or bringing down rival sites.
Cyber Crime	Phishing	Unlawful activity using fake websites or emails to fraudulently collect sensitive details like passwords and credit card info.	Financial loss and identity theft.
Cyber Crime	Ransomware	Malware that blocks user access to data through encryption and demands payment for the decryption key.	Loss of data access; extortion and blackmail using sensitive information.
Legal Measures	Indian IT Act	The Information Technology Act, 2000 (amended in 2008) providing legal framework for electronic governance and cyber crime penalties.	Mitigates menaces like tampering with source documents and unauthorized data publishing.
Health Impact	Ergonomics	The science of arranging workplaces and systems so they are safe and comfortable for the user.	Prolonged use of devices can cause eye strain, backaches, obesity, and painful wrists/fingers.

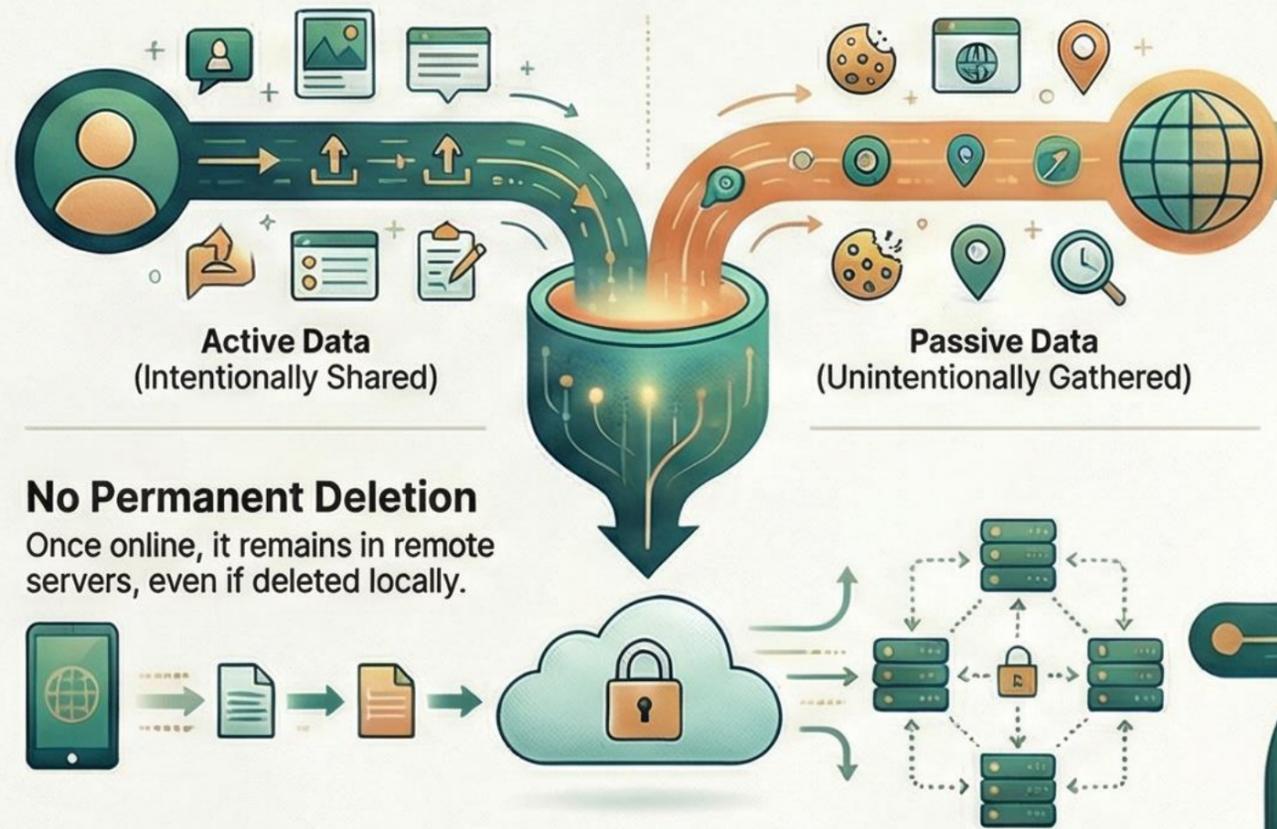
# Being a Better Netizen: A Guide to Digital Citizenship



# The Netizen's Blueprint: Navigating Your Digital Impact

## Your Permanent Digital Footprint

### Active vs. Passive Footprints



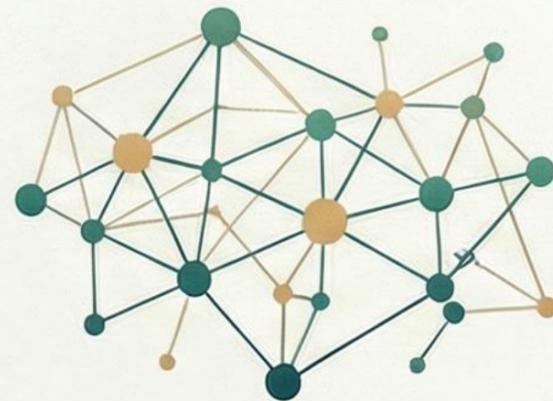
### No Permanent Deletion

Once online, it remains in remote servers, even if deleted locally.



### Data is a Traceable Map

Footprints allow others to trace your location, device details, and usage habits.



## The Responsible Netizen's Toolkit

### Practice the "Three E's" of Etiquette

Be Ethical with copyrights, Respectful of privacy, and Responsible regarding cyberbullying.



**Ethical**  
(Copyrights, IP)



**Respectful**  
(Privacy)



**Responsible**  
(Cyberbullying)

### Defend Against Cyber Crime

Use strong passwords, update software, and avoid clicking links from untrusted emails.



**Strong Passwords**



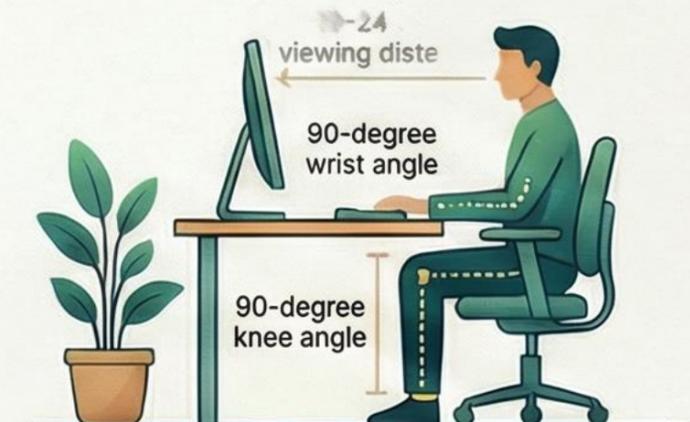
**Update Software**



**Avoid Untrusted Links**

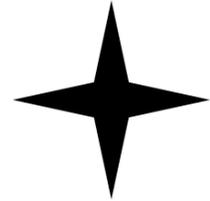
### Prioritize Digital Ergonomics

Maintain 19-24 inch viewing distances and 90-degree angles for wrists and knees.



1	2	3
<b>Copyright</b>	<b>Patent</b>	<b>Trademark</b>
<b>Protects:</b> Literary & artistic works	<b>Protects:</b> Technological inventions	<b>Protects:</b> Brand symbols & logos
<b>Key Characteristic:</b> Automatically granted to creators for original works	<b>Key Characteristic:</b> Must be applied for, protects for 20 years	<b>Key Characteristic:</b> Distinguishes a brand & commercial identity from competitors

# Reflection



*I think computer viruses should count as life. I think it says something about human nature that the only form of life we have created so far is purely destructive. We've created life in our own image.*

-- Stephen Hawking

As a Netizen, you choose whether your footprint is **constructive** or **destructive**. Let's make the internet a reflection of our best selves.