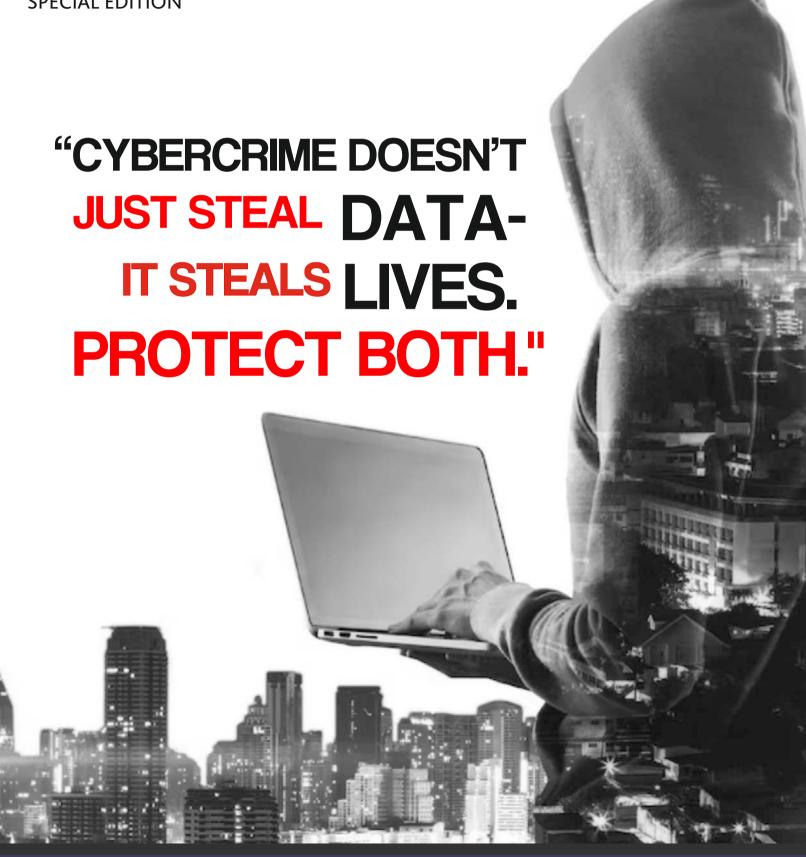
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From the

Editor's Desk

Through this edition of Punji Times, we spotlight the hidden wounds of cybercrime - where stolen data means stolen peace of mind. Imagine your intimate photos circulating online, life savings wiped out by a UPI scam, or your reputation shattered by deepfake fraud. In India, a new victim falls prey every 3 seconds (NCRB 2024), facing not just financial loss but lasting trauma: 68% of sextortion victims suffer in silence, while elderly scam targets show 3x higher depression rates.

Today's scammers wield alarming precision - AI-cloned voices of loved ones, WhatsApp traps in family groups, and Aadhaar details sold for less than a cup of chai. Even tech giants and world leaders aren't immune, as seen in high-profile breaches like the French President's email hack.

This isn't just about protecting data - it's about safeguarding mental wellbeing in our hyperconnected world. Stay alert, stay informed, and remember: in cyberspace, awareness is your strongest firewall.

Best,

Team Meri Punji



Punji (noun/Hindi) - Capital meaning, wealth in the form of money or other assets owned by a person or organization or available for a purpose such as starting a company or investing.

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Cybercrime: An Invisible Threat That Leaves Deep Scars 29



In today's digital age, Information Technology (IT) has transformed the way we live, work, and communicate. While it offers immense benefits, it also opens doors for malicious activities known as **cybercrimes**. Cybercrime involves illegal activities conducted using computers, networks, or the internet, either targeting individuals, businesses, or even national security.

India, with its rapidly growing internet user base (over **900 million users** as of 2024), has witnessed a sharp rise in cybercrimes. According to the National Crime Records Bureau (NCRB), India reported **65,893 cybercrime cases in 2022, a 24.4% increase** from the previous year. Financial frauds, phishing, ransom ware attacks, and cyber harassment are among the most common offenses.

The economic impact is staggering—India lost over 1.25 lakh crore (\$15 billion) to cybercrimes in 2023, as per a report by Indian Cyber Crime Coordination Centre (I4C). With increasing digital dependency, awareness and cyber security measures have become crucial for safeguarding personal and national interests.

Cyber terrorism in India

Cyber terrorism involves using digital means to disrupt critical infrastructure, spread fear, or threaten national security. In India, cyber terrorism has emerged as a significant concern due to:

- State-sponsored attacks: Alleged cyber-attacks from groups linked to China and Pakistan targeting Indian defence, banking, and government systems.
- **Ransomware attacks:** Indian hospitals, educational institutions, and businesses have faced ransomware attacks, crippling operations.
- Fake news & disinformation: Misinformation campaigns on social media have incited violence and communal tensions.

The Indian Computer Emergency Response Team (CERT-In) reported 1.39 million cyber security incidents in 2022, including phishing, malware, and data breaches. The government has strengthened cybersecurity laws and established Cyber Swachhta Kendra (Botnet Cleaning and Malware Analysis Centre) to combat such threats.

PunjiTimes



Types of Cyber Crime in India

Cybercrimes in India can be categorized as:

1. Based on Computer Usage

- ➤ Computer as a Tool: Fraudulent transactions, fake certificates, digital forgery.
- ➤ Computer as a Target: Malware, ransomware, DDoS attacks.
- ➤ Unauthorized Surveillance: Hacking into devices, spyware, illegal data access.

2. Based on the Victim

> Against Individual

- Phishing & Online Fraud: Fake UPI links, KYC scams.
- Cyberstalking & Harassment: Social media bullying, revenge porn.
- Financial Scams: Fake loan apps, investment frauds.

> Against Property

- Ransomware Attacks: Locking data for extortion.
- **Data Theft:** Stealing personal/ financial information.
- Digital Piracy: Illegal streaming, software cracking.

Against Government & Organizations

- Cyber Espionage: Hacking government databases.
- Website Defacement: Altering official websites.
- Critical Infrastructure Attacks: Targeting power grids, banking systems.

Based on Internet Usage

- > Darknet Crimes: Drug trafficking, illegal arms sales.
- ➤ Cryptocurrency Scams: Fake crypto exchanges, Ponzi schemes.
- ➤ Online Radicalization: Terrorist recruitment via social media.

Cyber Threats in India

A. Cyber Extortion

Cybercriminals use ransomware, DDoS attacks, or data leaks to extort money. In 2023, AIIMS Delhi faced a major ransomware attack, disrupting healthcare services. The Indian Cyber Crime Portal reports a 300% rise in UPI frauds in the last two years.

B. Cyber Warfare

India faces cyber threats from adversarial nations. The **2020 power grid attack in Mumbai** allegedly linked to Chinese hackers, highlighted vulnerabilities in critical infrastructure.

C. Cybersex Trafficking

India is a hotspot for online sexual exploitation. The National Human Rights Commission (NHRC) reported cases where victims were forced into live-streamed abuse. The POCSO Act and IT Act have been amended to combat such crimes.

Indian Laws & Cyber Security Measures

- ➤ Information Technology Act, 2000 (Amended in 2008): Penalizes hacking, data theft, cyber terrorism.
- ➤ Indian Penal Code (IPC) Sections: Fraud (420), Defamation (499), Criminal Intimidation (503).
- **Cyber Crime Cells:** Specialized police units in states to investigate cyber offenses.
- ➤ Cyber Awareness Initiatives: "Cyber Jaagrookta Diwas" promotes digital literacy.

Cybercrime is a growing menace in India, affecting individuals, businesses, and national security. With increasing digitalization, awareness and proactive cybersecurity measures are essential. By staying informed, using strong passwords, enabling two-factor authentication, and reporting suspicious activities, citizens can contribute to a safer cyber ecosystem.

(Sources: NCRB 2022 Report, CERT-In, I4C, RBI Cyber Fraud Data)

PunjiTimes WEPLAN, YOU PROSPER TECHNIQUES

01 Hacking (Unauthorized Access)

Definition:

Gaining unauthorized access to computer systems/networks by bypassing security measures.

Modern Twist:

INTRODUCTION TO

CYBERCRIME

METHODS

As India's digital landscape expands,

cybercriminals are employing increasingly

sophisticated techniques to exploit

vulnerabilities. Below is an updated and

expanded list of cybercrime methods,

including new threats and prevention

strategies relevant to India in 2024.

- AI-Powered Hacking: Attackers use machine learning to guess passwords faster.
- Cloud Jacking: Hackers exploit misconfigured cloud storage (e.g., AWS S3 buckets).

Indian Example:

In 2023, **AIIMS Delhi** suffered ransomware attack due to weak passwords.

Prevention:

- Use multi-factor authentication (MFA).
- Regularly update firewall & intrusion detection systems.

Denial-of-Service (DoS/DDoS) Attacks

Definition:

Overloading a server with fake traffic to crash it.

Modern Twist:

- IoT Botnets: Hackers infect smart devices (CCTVs, routers) to launch larger attacks.
- Ransom DDoS: Attackers demand Bitcoin to stop the attack.

Indian Example:

Jio Networks faced a massive DDoS attack in 2022.

Prevention:

Use **cloud-based DDoS protection** (e.g., Cloudflare). Monitor network traffic for anomalies.

O3 Cyberstalking & Online Harassment

Definition:

Using digital means to stalk/intimidate victims.

Modern Twist:

- Deepfake Revenge Porn: Al-generated fake nudes used for blackmail.
- Location Tracking via Social Media: Stalkers use geotags to track victims.

Indian Example:

45% of women in India face online harassment (NCW 2023).

Prevention:

- Disable location sharing on apps.
- Report offenders via Cyber Crime Portal (cybercrime.gov.in).

O4 Salami Attacks (Micro-Theft)

Definition:

Stealing tiny amounts from multiple accounts to avoid detection.

Modern Twist:

UPI Salami Fraud: Hackers steal ₹10-₹50 from thousands of accounts.

Prevention:

Check bank statements for small, unexplained deductions.

O5 Trojan & Keyloggers

Definition:

Malware that records keystrokes (passwords, card details).

Modern Twist:

Mobile Keyloggers: Spyware hidden in fake loan/utility apps.

Indian Example:

BharatPe fraud (2023) involved keyloggers stealing merchant data.

Prevention:

Download apps **only from official stores**. Use **on-screen keyboards** for sensitive inputs.

106 Intellectual Property (IP) Theft

Definition:

Stealing patents, copyrights, or trade secrets.

Modern Twist:

AI-Generated Plagiarism: Scraping content using ChatGPT-like tools.

Indian Example:

Pharma formula leaks from Indian labs (2024).

Prevention:

Use **digital watermarking** for sensitive documents.

Web Defacement & Jacking

Definition:

Hackers replace a legit website with fake content.

Modern Twist:

DNS Hijacking: Redirecting users to phishing sites.

Indian Example:

Indian Railways site defaced (2023).

Prevention:

Enable **DNSSEC** (DNS Security Extensions).

Ransomware

Definition:

Encrypting data and demanding ransom.

Modern Twist:

Double Extortion: Hackers threaten to leak data if ransom isn't paid.

Indian Example:

Delhi Police FIR portal hacked (2024).

Prevention:

- Maintain offline backups.
- Use next-gen antivirus (e.g., CrowdStrike).

SIM Swapping Attack

Definition:

Fraudsters port victim's number to a new SIM.

Modern Twist:

Aadhaar-linked SIM swaps: Using leaked Aadhaar data for verification.

Prevention:

Enable SIM Lock via mobile operator.

ATM Skimming & Card Cloning

Definition:

Stealing card data via hidden skimmers.

Modern Twist:

Bluetooth Skimmers: Transmit data wirelessly.

Prevention:

Use contactless payments (NFC avoids skimmers).

Phishing & Spear Phishing

Definition:

Fake emails/messages tricking users into revealing data.

Modern Twist:

AI-Generated Phishing: ChatGPT crafts highly personalized scams.

Indian Example:

ICICI Bank phishing scam (2024)

Prevention:

Verify sender email addresses.



Cryptocurrency Scams

Definition:

Fake crypto exchanges/investment schemes.

Modern Twist:

■ Rug Pulls: Developers abandon projects after stealing funds.

Indian Example:

GainBitcoin Ponzi scam (₹20,000 crore loss).

Prevention:

Use only SEBI-registered platforms.

Al-Powered Cybercrimes (NEW)

- Deepfake Scams:
 - Al-cloned voices of relatives asking for emergency money.
- AI-Generated Fake KYC:
 - Fraudsters bypass verification using AI-generated IDs.

QR Code Scams (India-Specific)

How It Works

Fake UPI QR codes at shops/parking.

Prevention:

Always verify merchant name before scanning.

15 Dark Web Markets

Indian Impact

Aadhaar data sold for ₹500 (Delhi Police, 2023).

Prevention:

Freeze biometrics via UIDAI.

16) Digital Arrest

Definition:

A form of cyber extortion where scammers impersonate law enforcement officials (e.g., police, CBI, or customs officers) and threaten victims with arrest or legal action unless they pay a fine or bribe.

How it Works:

- Scammers call victims, claiming they are involved in illegal activities (e.g., money laundering, drug trafficking, or cybercrime).
- They use fear tactics, such as threatening to arrest the victim or harm their family. Victims are forced to stay on video calls (often for hours or days) until they pay the demanded amount.

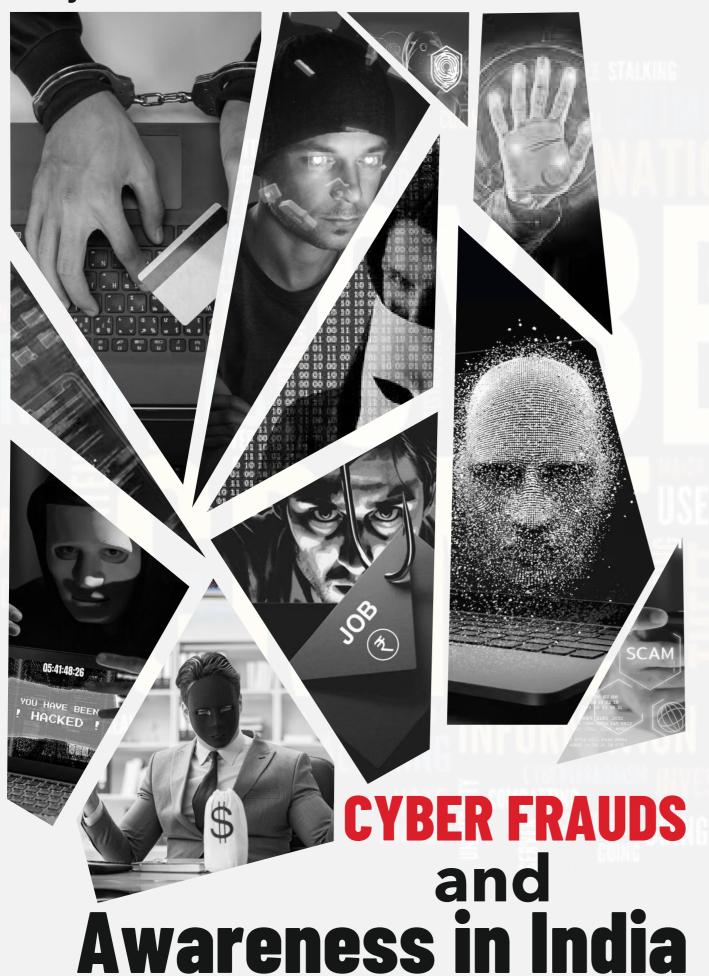
Prevention:

- Stay Calm: Do not panic if you receive such a call.
- Verify the Caller: Ask for official identification and contact thelocal police station to verify the claim.
- Do Not Share Personal Information: Never share sensitive details like Aadhaar, PAN, or bank information.
- Report Immediately: Contact the National Cyber Crime Helpline (1930) or visit https://cybercrime.gov.in.

Key Takeaways for India (2024)

- 1. UPI/Card Frauds are the most common (RBI 2024).
- 2. Al-powered scams are rising (CERT-In alert).
- 3. **Report cybercrime** at cybercrime.gov.in or dial 1930

PunjiTimes



yber frauds are on the rise globally, with India being one of the most targeted nations due to its rapidly growing digital population. Every day, thousands of individuals fall victim to online scams, often due to a lack of awareness about cyber threats. Fraudsters exploit ignorance, trust, and technological vulnerabilities to commit crimes ranging from financial theft to identity fraud.

According to the Indian Cyber Crime Coordination Centre (I4C), India witnessed over 1.39 million cybercrime cases in 2023, with financial frauds constituting nearly 60% of the total. The National Cyber Crime Reporting Portal recorded an average of 5,000 complaints daily, highlighting the urgent need for public awareness and stronger cybersecurity measures.

Inancial Frauds

With the surge in digital payments (UPI, net banking, e-wallets), financial frauds have become rampant. Common scams include:

- **UPI/Phishing Scams:** Fake customer care calls, QR code scams, and fraudulent UPI payment links.
- SIM Swap Fraud: Criminals duplicate SIM cards to bypass OTP authentication.
- Credit/Debit Card Skimming: Cloning cards through ATMs or POS devices.





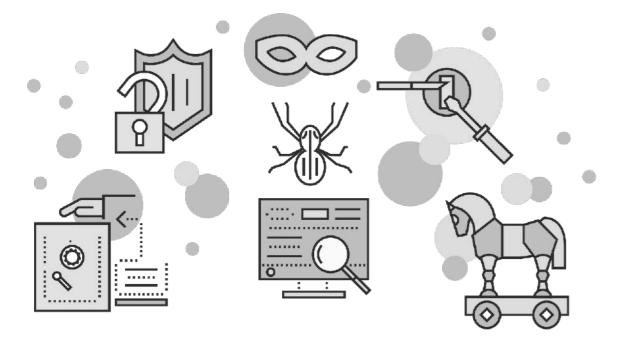
102 Data Theft & Identity Fraud

Personal data is the new gold for cybercriminals. Data breaches, phishing emails, and malware attacks lead to:

- Aadhaar/PAN card misuse for fake loans or bank accounts.
- Social media profile cloning for impersonation scams.
- Medical insurance frauds using stolen health records.

Prevention Tips:

- Avoid sharing sensitive documents online unnecessarily.
- Use **strong**, **unique passwords** for different accounts.
- Enable **privacy settings** on social media.



Job Frauds

Fake job offers lure unemployed youth with high-paying work-from-home opportunities. Common scams:

- Advance Fee Fraud: Paying for "training" or "registration fees" for fake jobs.
- Data Entry/Part-Time Job Scams: Victims are asked to deposit money for "work materials."
- Fake Recruitment Agencies: Fraudsters pose as HR executives from reputed companies.

Prevention Tips:

- Verify job postings on official company websites/LinkedIn.
- Never pay money for "job opportunities."
- Check for **fake interview calls** via email/WhatsApp.

Matrimonial

Online matrimonial platforms (Shaadi.com, BharatMatrimony) are misused for:

- Fake Profiles: Scammers pose as prospective matches to extort money.
- Romance Scams: Emotional manipulation leading to financial exploitation.
- Dowry Fraud: Fake marriage demands followed by extortion.

Prevention Tips:

- Conduct background checks before sharing personal details.
- Avoid transferring money to unknown partners.
- Use verified matrimonial sites with strict KYC policies.

05 Social Media Frauds

With over 500 million social media users in India, scams include:

- Fake Lottery/Gift Scams: "You won an iPhone! Click the link."
- Investment Frauds: Fake stock/crypto schemes promising high returns.
- Cyberbullying & Sextortion: Blackmail using private photos/videos.

Prevention Tips:

- Do not click on suspicious links.
- · Report fake profiles/scam pages immediately.
- Avoid sharing personal life details publicly.

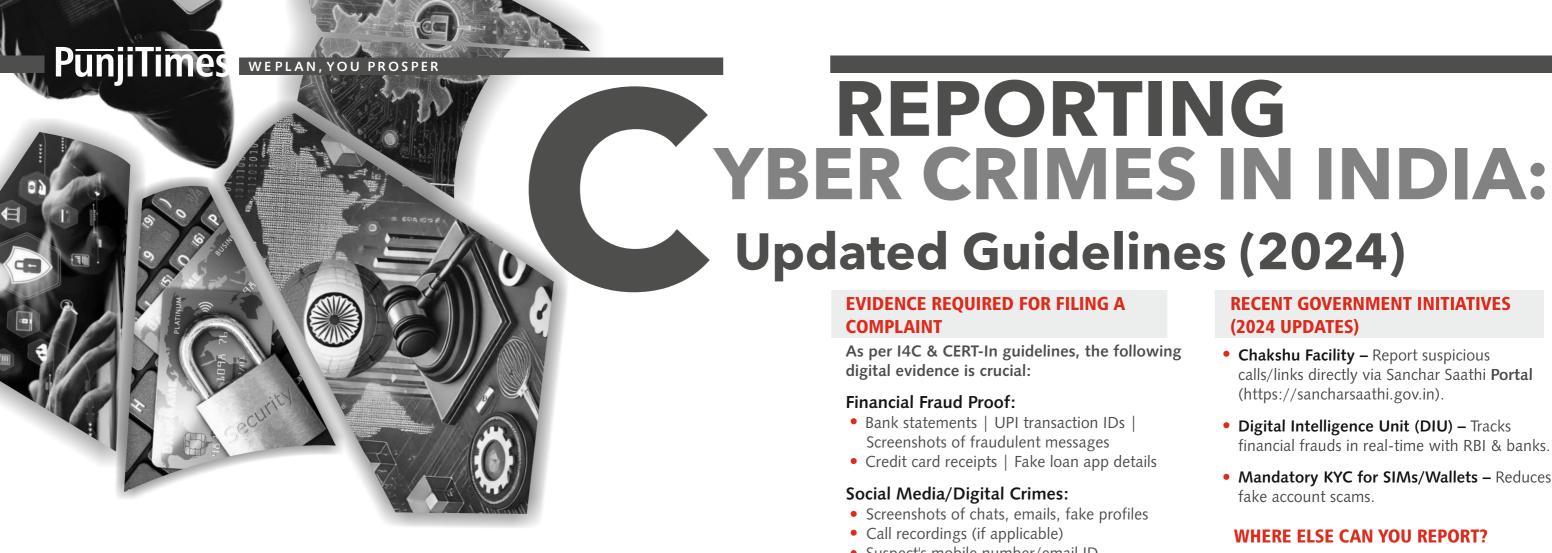
Government Initiatives Against Cyber Frauds

- Cyber Crime Portal (https://cybercrime.gov.in): Online complaint filing for cyber frauds.
- Chakshu Facility (2024): Allows reporting of suspected fraud calls/messages.
- **Digital Literacy Programs:** "Digital India" campaigns to educate citizens.

Cyber frauds are evolving, but awareness and caution can prevent most scams. Always:

- Verify before trusting any online offer.
- Use secure passwords & 2FA.
- Report frauds immediately to Cyber Crime Helpline (1930).

"Stay Alert, Stay Secure— Don't Let Fraudsters Win!"



OFFICIAL CHANNELS FOR CYBER CRIME REPORTING

The Government of India has strengthened its cyber crime reporting mechanisms to combat the rising digital offenses. The primary platform is:

> **Indian Cyber Crime Coordination** Centre (I4C) Portal

> Website: https://cybercrime.gov.in

Helpline: 1930 (Toll-free Cyber Crime Helpline)

This portal allows citizens to report all types of cybercrimes, with special focus on crimes against women and children.

HOW TO REPORT A CYBER CRIME?

Option 1: Report Crimes Against Women/Children

For: Child Sexual Abuse Material (CSAM), Rape/Gang Rape (RGR) content, cyberstalking, sextortion, revenge porn.

Anonymous reporting allowed for sensitive cases.

Complaints cannot be withdrawn once filed.

Option 2: Report Other Cyber Crimes For:

- Financial frauds (UPI scams, fake loan apps, phishing)
- Social media crimes (fake profiles, cyberbullying)
- Hacking/data theft
- Cryptocurrency scams
- Online job/matrimonial frauds
- Mobile app frauds

Can be withdrawn before FIR registration.

EVIDENCE REQUIRED FOR FILING A COMPLAINT

As per I4C & CERT-In guidelines, the following digital evidence is crucial:

REPORTING

Financial Fraud Proof:

- Bank statements | UPI transaction IDs | Screenshots of fraudulent messages
- Credit card receipts | Fake loan app details

Social Media/Digital Crimes:

- Screenshots of chats, emails, fake profiles
- Call recordings (if applicable)
- Suspect's mobile number/email ID

Hacking/Data Theft:

• IP logs | Malware samples | Ransomware messages

Note:

- Preserve original evidence (do not delete chats/emails).
- Use **screen recording** for dynamic scams (e.g., fake customer care calls).

WHAT HAPPENS AFTER REPORTING?

- Automated Ticket Generation: A unique complaint ID is issued for tracking.
- Forwarded to State Cyber Cell: The respective state police's Cyber Crime Investigation Unit takes action.
- FIR Registration: If evidence is strong, an FIR is filed under IT Act, IPC, or PMLA (for financial frauds).
- Investigation: Authorities may freeze fraudulent accounts, block scam websites, or make arrests.

RECENT GOVERNMENT INITIATIVES (2024 UPDATES)

- Chakshu Facility Report suspicious calls/links directly via Sanchar Saathi Portal (https://sancharsaathi.gov.in).
- Digital Intelligence Unit (DIU) Tracks financial frauds in real-time with RBI & banks.
- Mandatory KYC for SIMs/Wallets Reduces fake account scams.

WHERE ELSE CAN YOU REPORT?

Type of Crime	Reporting Platform	Contact
Financial Fraud	Bank's Cyber Cell + National Cyber Portal	1930 / 112 (Police)
Social Media I Platform's Grie I4C	Grievance Portal	
Data Breach	CERT-In (Indian Computer Emergency Team)	incident@ cert-in.org.in

KEY PRECAUTIONS

- Never share OTPs, CVV, or UPI PINs Banks never ask for these.
- Verify contacts Call back on official numbers before acting on requests.
- Use DigiLocker Securely store documents to prevent ID theft.

(Sources: MHA Cyber Crime Portal, CERT-In Bullet in 2024, RBI Fraud Data)

How To **PROTECT** YOURSELF **AGAINST**

Essential Cybersecurity Practices

Install & Update Security Software

CYBERCRIMES

- Use premium antivirus (Kaspersky, Bitdefender, Norton) for real-time protection against:
- Ransomware, spyware, phishing attacks
- Banking trojans & malicious downloads
- **Enable firewalls** on all devices
- Update software regularly Outdated apps are easy targets

Create Strong, Unique Passwords

- **●** Follow 2024 password best practices:
 - Minimum 12 characters (longer = stronger)
 - Mix uppercase, numbers, symbols (e.g., Secur3P@ss2024!)
 - Never reuse passwords across accounts
 - Use a password manager (Bitwarden, 1Password)
- **●** Enable Multi-Factor Authentication (MFA) everywhere possible (SMS/ authenticator apps)

Cyber threats are evolving rapidly, but by following these updated security measures, you can significantly reduce your risk of becoming a victim:

Beware of Phishing & Fraudulent Links

Red flags of scam links:

- Misspelled URLs (e.g., paypai.com instead of paypal.com)
- · Unsolicited emails/messages urging immediate action
- Too-good-to-be-true offers
- **♠** Always hover over links to check the real URL before clicking

Secure Financial Transactions

- For UPI/Banking Safety:
 - Never share OTP, UPI PIN, CVV (even with "bank officials")
 - Use bank-approved apps only (avoid third-party payment links)
 - Check SMS alerts for unauthorized transactions

Mobile Payment Tips:

- Disable "auto-save card" features in shopping apps
- Set transaction limits on wallets

Webcam & Privacy Protection

- Webcam Security:
 - Cover with tape when not in use
 - Disable camera access for unnecessary apps

Smartphone Safety:

- Turn off location services forsocial media apps
- Review app permissions monthly

Social Media Safety

Privacy Settings Checklist:

- Set profiles to "Private"
- Limit personal info (DOB, address, family details)
- Disable "Tagging" without approva

Avoid:

- Accepting requests from strangers
- Posting vacation pics in real-time
- Participating in viral "quizzes" (data mining scams)

Update Devices & Use Secure Networks

Update Regularly:

- OS (Windows, macOS, Android, iOS)
- Browsers (Chrome, Edge, Firefox)
- · All apps (especially banking & social media)

Wi-Fi Safety:

- Never use public Wi-Fi for banking/shopping
- Use VPNs (ProtonVPN, NordVPN) onz untrusted networks

Child Online Safety

- For Parents:
 - Use parental control apps (Google Family Link, Qustodio)
 - Educate kids about online grooming & cyberbullying
 - Monitor gaming chats (scammers target children via games like Free Fire)

Email & Messaging Security

- Avoid Email Scams:
 - Never open attachments from unknown senders
 - Check sender's email address carefully (e.g., support@amaz0n.net is fake)

WhatsApp/Telegram Scams:

- Ignore "free Bitcoin" or "job offer" messages
- Enable two-step verification

Regular Security Checkups

Monthly Routine:

- Scan devices for malware
- Review bank statements for fraud
- Check **haveibeenpwned.com** for data breaches

What to Do If Hacked?

- Disconnect from the internet
- Change all passwords immediately
- Report to cybercrime gov.in or call
- Notify banks if financial data is compromised

"Stay Alert, Stay Secure -**Cybercrime Prevention** Starts With You!"

(Sources: CERT-In, RBI Cybersecurity Guidelines, NCRB 2024 Report)



Cybersecurity And The Evolving

ROLE OF PROFESSIONALS

The Critical Importance of Cybersecurity

In today's digital-first world, cybersecurity is no longer just an IT concern—it's a strategic business imperative. Cybersecurity involves protecting an organization's data, systems, networks, and digital assets from cyber threats such as:

- Data breaches (e.g., ransomware, phishing)
- Financial fraud (e.g., UPI scams, business email compromise)
- Insider threats (e.g., employee negligence, malicious insiders)
- Advanced Persistent Threats (APTs) (statesponsored cyberattacks)

According to CERT-In, India faced over 1.4 million cyber incidents in 2023, with financial frauds and ransomware attacks increasing by 35%. This makes cybersecurity professionals indispensable in safeguarding businesses.

Key Responsibilities of Cyber Security Professionals



01 Cybersecurity Governance & Risk Management

- Develop and enforce security policies aligned with ISO 27001, NIST, and GDPR compliance.
- Conduct regular risk assessments to identify vulnerabilities.
- Ensure board-level cyber security awareness- treat cyber risks at par with financial, operational, and reputational risks.

Access Control & Data Protection

- Implement Zero Trust Architecture (ZTA) -"Never trust, always verify."
- Enforce least privilege access Employees access only what they need.
- Encrypt sensitive data (at rest & in transit) to prevent leaks.

103 Threat Detection & Incident Response

- Deploy Al-driven SIEM (Security) Information & Event Management) tools for real-time monitoring.
- Conduct penetration testing & red teaming to simulate cyber attacks.
- Develop an incident response plan (IRP) -Steps to contain, eradicate, and recover from breaches.

Employee Awareness & Training

- Conduct phishing simulations to test employee vigilance.
- Train staff on secure practices (e.g., strong passwords, 2FA, safe browsing).
- Enforce strict BYOD (Bring Your Own Device) policies for remote work security.

Technology & Infrastructure Security

- Patch management Keep all software updated to prevent exploits.
- Endpoint protection Use EDR (Endpoint Detection & Response) tools.
- Secure cloud environments Apply CSPM (Cloud Security Posture Management).



Disaster Recovery & Business Continuity

- Maintain offline backups (3-2-1 rule: 3 copies, 2 media types, 1 offsite).
- Test disaster recovery plans regularly.
- Cyber insurance -Mitigate financial losses from breaches.

Emerging Trends in Cybersecurity

AI & Machine Learning in Cyber Defense

- AI-powered threat detection (e.g., Darktrace, CrowdStrike)
- Deepfake fraud prevention (voice cloning, video manipulation)

Rise of Quantum **Computing Threats**

Post-quantum cryptography to counter future decryption risks.

2

Increased Regulatory Scrutiny

- DPDP Act 2023 (India's Data Privacy Law) imposes strict penalties for breaches.
- RBI's cybersecurity guidelines for financial institutions.

Remote Work Security Challenges

Securing hybrid work environments with SASE (Secure **Access Service** Edge).

Skills Required for Cybersecurity Professionals

Technical Skills	Soft Skills
Ethical Hacking	Critical Thinking
Cloud Security (AWS, Azure)	Problem-Solving
Network Security (Firewalls, IDS/IPS)	Communication
Digital Forensics	Leadership
Threat Intelligence Analysis	Adaptability

Certifications to Pursue:

Certified Ethical Hacker (CEH) **CISSP (Certified Information Systems Security Professional) CISA (Certified Information Systems Auditor)**

Cybersecurity professionals are the first line of defense against evolving cyber threats. Organizations must invest in **skilled talent**, advanced tools, and employee training to stay secure.

(Sources: CERT-In, NASSCOM 2024 Report, DPDP Act 2023, RBI Guidelines)

NOTABLE CYBERCRIME INCIDENTS: A Global And Indian

Cybercrime continues to evolve with increasing sophistication, targeting governments, corporations, and individuals worldwide. Below are some of the most significant cyber incidents, including recent attacks impacting India.

MAJOR GLOBAL CYBERCRIME CASES

Aadhaar Data Breach (2018) – India

- What Happened? A security flaw in India's Aadhaar database (containing biometric data of **1.2 billion citizens**) allowed unauthorized access.
- Impact: Personal details, including Aadhaar numbers, bank details, and addresses, were reportedly sold on the dark web for as low as ₹500 per record.
- Aftermath: UIDAI denied a "breach," calling it "misreporting," but security experts confirmed vulnerabilities.

Capital One Data Breach (2019) - USA/Canada

- What Happened? A hacker exploited a misconfigured AWS firewall, stealing 100 million US + 6 million Canadian customers' data.
- Impact: Exposed credit scores, SSNs, and bank details.
- **Aftermath:** Suspect **Paige Thompson** (ex-AWS employee) was arrested.

WannaCry Ransomware Attack (2017) – UK & Global

- What Happened? A North Korean-linked ransomware encrypted NHS systems, demanding Bitcoin payments.
- Impact: 200,000+ systems in 150 countries paralyzed. UK hospitals cancelled surgeries.
- **Aftermath:** Microsoft released emergency patches; cyber warfare concerns grew.

SolarWinds Hack (2020) – USA (Russian Hackers)

- What Happened? Russian group APT29 (Cozy Bear) breached SolarWinds' Orion software, infecting 18,000+ organizations, including US govt. agencies.
- Impact: Espionage on Pentagon, Treasury, and Fortune 500 firms.
- Aftermath: US sanctioned Russia; Biden signed Cybersecurity Executive Orders.

Pegasus Spyware Scandal (2021) – Global

- What Happened? NSO Group's Pegasus spyware infected 50,000+ phones, targeting journalists, activists, and politicians.
- Impact: India's Rahul Gandhi, Ashok Lavasa, and 300+ others were potential
- Aftermath: Apple sued NSO Group; Indian govt. investigated.



RECENT CYBERCRIMESIN INDIA (2022-2024)



- What Happened? Hackers encrypted 1.3 TB of patient data, demanding ₹ 200 crore in Bitcoin.
- Impact: Hospital operations halted for weeks; patient records held hostage.
- Aftermath: Suspected Chinese hackers behind the attack.

UPI Fraud Epidemic (2023-24)

- What Happened? Phishing scams via fake customer care calls, QR codes, and UPI payment links.
- Impact: Indians lost ₹10,319 crore in digital frauds in 2023 (RBI).
- Aftermath: RBI introduced UPI fraud detection AI and mandatory cooling periods for first-time payees.

Cosmos Bank Cyber Heist (2018) – Pune

- What Happened? Hackers stole ₹ 94 crore via malware-infected SWIFT system.
- Impact: One of India's biggest bank cyber thefts.
- Aftermath: North Korean Lazarus Group suspected.

Juspay Data Breach (2021) - Bengaluru

- What Happened? Hackers stole 100 million users' card details from the payment processor.
- Impact: Data sold on dark web forums.
- Aftermath: FIR filed; RBI tightened fintech security norms.

Air India Data Breach (2021)

- What Happened? 4.5 million passengers' data leaked after a SITA PSS hack.
- Impact: Passport, credit card, and travel details exposed.
- Aftermath: Air India faced GDPR fines and lawsuits.

Historical Cybercrime Cases

Case	Year Impact
Yahoo Data Breach	2013 3 billion accounts hacked (largest in history)
Gary McKinnon (NASA Hack)	2002 Hacked 97 US military systems for "UFO evidence"
Kevin Mitnick (FBI's Most Wanted Hacker)	1995 Stole corporate source code & passwords
Turkish Citizen Data Leak	2016 49 million Ids exposed online
Carbanak Bank Heist (Russian Hackers)	2015 \$1 billion stolen from 100+ banks

CYBER SECURIT

Emerging Cyber Threats (2024)

- AI-Powered Deepfake Scams (voice cloning for fraud)
- Quantum Computing Hacks (breaking encryption)
- Ransomware-as-a-Service (RaaS) (affordable cybercrime tools)
- 5G Network Exploits (faster attacks on IoT devices)



- No organization or individual is safecyberattacks affect everyone.
- India is a prime target due to rapid digitization and weak cybersecurity awareness.
- Strong passwords, **2FA**, and vigilance are critical defences.



A 2024 Perspective

Introduction to India's Cyber Legal Framework

India's digital economy, projected to reach \$1 trillion by 2030, necessitates robust cyber laws to combat increasing cybercrimes, data breaches, and digital frauds. The foundation of India's cyber legislation is the Information Technology Act, 2000 (IT Act), which has undergone amendments to address emerging challenges in cyberspace.

Key Cyber Laws & Regulations in India (2024 Update)

Legislation	Year	Purpose
Information Technology Act (IT Act)	2000 (Amended 2008)	Legal recognition to e-commerce, digital signatures, cybercrime penalties.
IT (Certifying Authorities) Rules	2000	Regulates digital signature certifications.
IT (Reasonable Security Practices) Rules	2011	Mandates data protection & security practices for corporates.
Digital Personal Data Protection Act (DPDPA)	2023 (Enforced in 2024)	India's first comprehensive data privacy law, governing personal data processing, rights of individuals, and penalties for violations.
Indian Penal Code (IPC) Cyber Amendments	2023	New sections like 66F (cyber terrorism), 354D (cyberstalking).
RBI's Cyber Security Framework	2024	Enhanced guidelines for banks & fintech firms on cybersecurity.

Why Cyber Laws Are Essential in India?

- **Exponential Growth of Digital Transactions**
 - UPI recorded 14B+ transactions in Q1 2024 (NPCI).
 - Rising Al-driven frauds necessitate legal safeguards.

Increasing Cybercrime

- Over 1.5M cybercrime cases reported in 2023 (NCRB).
- Financial frauds (78%) dominate cyber offenses.

- **Data Privacy** Concerns
 - Aadhaar breaches, Pegasus spyware scandals highlighted privacy gaps.
 - DPDP Act 2023 imposes ₹500 crore penalties for violations.

Global Compliance Requirements

• Cross-border data flows require alignment with EU's GDPR, US **CLOUD Act.**



1. IT Act, 2000 (Amended 2008)

- Section 43 Penalties for unauthorized computer access.
- Section 66 Punishment for hacking (up to 3 yrs imprisonment + 5L fine).
- Section 66A Struck down in 2015 (Shreya Singhal Case) for restricting free speec
- Section 69 Govt. powers to intercept/decrypt data.

2. Digital Personal Data Protection Act (DPDPA), 2023

- Consent-based data processing.
- Right to Erasure Users can request data deletion.
- Data Localization Critical personal data must be stored in India.

3. Recent IPC Amendments (2023)

- Section 66F Cyber terrorism (life imprisonment).
- Section 354D Cyberstalking (3 yrs + fine).

4. RBI's Cybersecurity Guidelines (2024)

- 24/7 fraud monitoring for banks.
- Biometric authentication for high-value transactions.

Future of Cyber Laws in India

- AI Regulation Bill (Expected 2025) Governing ChatGPT-like tools.
- Cyber Warfare Doctrine Countering state-sponsored attacks.
- Blockchain Smart Contracts Legal recognition under consideration.

Conclusion

India's cyber laws are evolving to match global standards, but enforcement and awareness remain critical. With digital transformation accelerating, continuous updates to legal frameworks are essential to protect citizens and businesses.

(Sources: MeitY, RBI, NCRB 2023 Report, DPDP Act 2023)



Cybercrime

An Invisible Threat That Leaves Deep Scars

More Than Just Financial Loss - A Violation of the Mind

Cybercrime isn't just about stolen money or hacked accounts—it's a deeply personal violation that leaves victims grappling with fear, anxiety, and lasting emotional trauma. Imagine waking up to find:

- Your private photos circulating online after a phone hack
- Years of savings wiped out by a UPI scam
- Fake social media profiles ruining your reputation
- **Blackmail threats** over intimate messages you thought were private

These aren't hypothetical scenarios. **Every 3 seconds**, someone in India falls victim to cybercrime (NCRB 2024). No one is immune—not students, not seniors, not even tech CEOs



Paranoia & **Trust Issues**

"Was that a real bank call?'

'Can I ever share photos with loved ones again?"

Shame & Isolation 68% of sextortion victims don't report due to embarrassment (Cyber Peace Foundation 2023)

Professional Consequences

Job seekers blacklisted after resume data leaks

Entrepreneurs losing businesses to ransomware

Financial Anxiety

Elderly victims of pension scams show 3x higher depression rates (AIIMS Study 2024)

Why Everyone's a Target

Your vulnerability isn't about being "careless"—it's about criminals becoming frighteningly precise:

- Al-powered phishing mimics loved ones' voices
- Deepfake blackmail uses one social media photo
- WhatsApp scams target family group chats
- Dark web markets sell Indian IDs for less than a chai (₹ 500 per Aadhaar-PAN combo)

Even cybersecurity experts get hacked. French President Macron's emails were breached despite elite protection—proof that awareness is our strongest shield.

Breaking the Silence

We must:

- **Talk openly** about cyber trauma (it's not the victim's fault)
- Teach digital self-defense like we teach road safety
- Demand better laws for victim support

Your mind is precious data too. Protect it by:

- Using privacy settings aggressively
- Verifying every unusual request (even from "friends")
- Reporting incidents without shame

(Sources: NIMHANS Cyber Trauma Study 2023, Cyber Peace Foundation, NCRB)



DON'TS FOR





DON'TS



- ▶ Create strong, unique passwords (12+ characters mixing letters, numbers, symbols).
- ▶ Use a **password manager** (like Bitwarden or 1Password) to store credentials securely.
- ▶ Enable two-factor authentication (2FA) everywhere possible.



- ▶ Keep all devices **updated** with latest software patches.
- ▶ Install reputable antivirus software (even on smartphones).
- ▶ Lock devices when not in use (PIN, fingerprint, or face ID).

Safe Browsing Habits

- ▶ Look for "https://" and padlock icon before entering sensitive info.
- ▶ Use a **VPN** on public Wi-Fi networks.
- ▶ Log out of accounts when done, especially on shared devices.

Data Protection

- ▶ Back up important files regularly (use encrypted cloud storage or external drives).
- ▶ Review app permissions don't grant unnecessary access to contacts/photos.
- ▶ Freeze your credit with major bureaus to prevent identity theft.

Special Threats in 2024

- 1. Al voice cloning scams Verify unusual voice calls by calling back on known numbers
- 2. QR code fraud Check URL before scanning any payment QR
- 3. Fake job offers Legitimate employers won't ask for payment upfront

1 Password Pitfalls

- ▶ Never reuse passwords across accounts.
- ▶ Don't write down passwords or store them in notes/emails.
- ▶ Avoid obvious password hints (mother's maiden name, pet names).

102 Risky Online Behaviour

- ▶ Don't click suspicious links in emails/texts (even from known contacts).
- Avoid oversharing on social media (birthdates, vacation plans).
- ▶ Never download attachments from unknown senders.

Financial Safety

- ▶ Don't share OTPs, CVV, or UPI PINs with
- Avoid saving card details on shopping websites.
- ▶ Never make payments through unverified links.

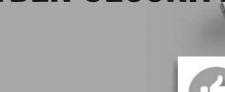
Device Dangers

- ▶ Don't use public computers for banking/shopping.
- ▶ Avoid **charging phones** at public USB ports (use power banks).
- ▶ Never jailbreak/root your devices.

What to Do If Hacked?

- 1. Immediately change all passwords
- 2. Contact your bank if financial info was compromised
- 3. Report to cybercrime.gov.in or call 1930 (India's cyber helpline)
- 4. Alert contacts if your accounts were used to send spam









Every individual is unique and so are his or her investment needs. Investment planning must always be aligned with one's goals. Hence, our approach is to help you chalk out an investment strategy that is best fit for 'you'.

We see ourselves as educators rather than advisors. Our endeavor is to build awareness about the various kinds of investment products in the market. After all, an informed decision is always a better decision.