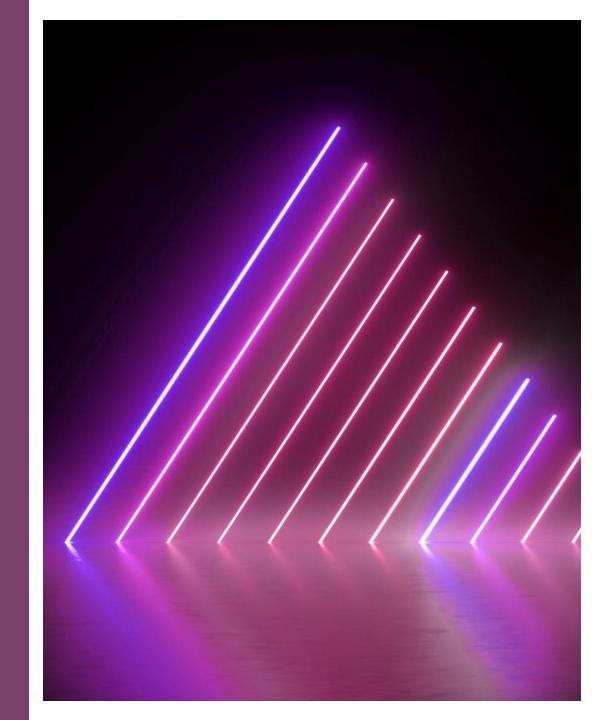
Safety in Cyber World & How Al is Powering the Crimes

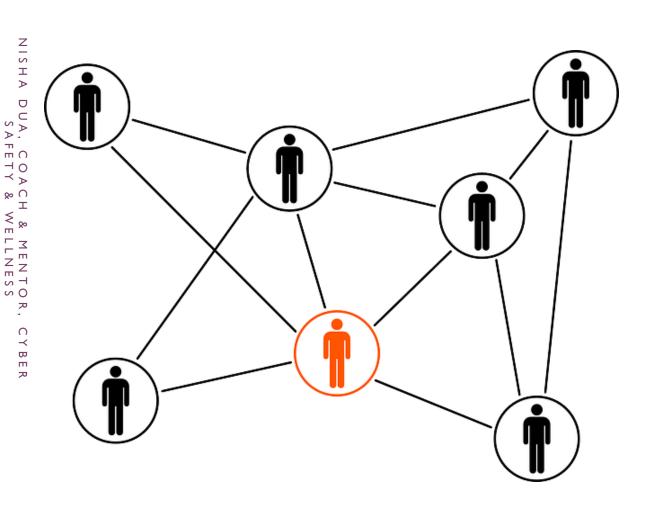
Nisha Dua

Coach & Mentor - Cyber Safety
& Wellness



17-09-202

WE LIVE IN AN INTERCONNECTED WORLD





WHICH IS AT OUR FINGERTIPS



Source: https://www.globaldataexcellence.com/wp-content/uploads/2017/02/Global-Data-Excellence-Data-governance-market-report.jpg

P \cap

The New World Order

MANY OPPORTUNITIES & POSSIBILITIES

BUT

TECHNOLOGY IS A DOUBLE-EDGED SWORD

Imagine you received an urgent mail from

Department of Education or your Senior in the

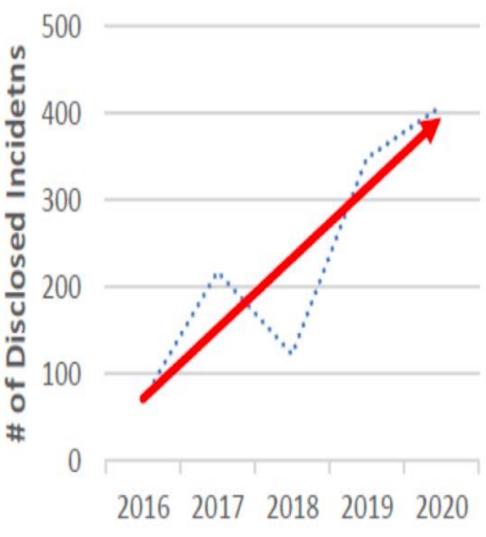
Department, asking urgently for student's data.

The mail appears professional and also has a

matching Department logo.

<u>What would you do?</u>





Case Studies



- 1. **** school website hacked, homepage replaced with obscene images
- 2. School in *** was hacked, and the hackers threatened to post student and teacher data online if a \$40 million ransom wasn't paid
- 4. Couple loses 4.5 crore in Digital arrest
- 5. ... was blackmailed over her morphed photos

Why are people & organizations becoming so vulnerable in Digital Age?



Why cyber crime is more prevalent now?

Increased digital dependence

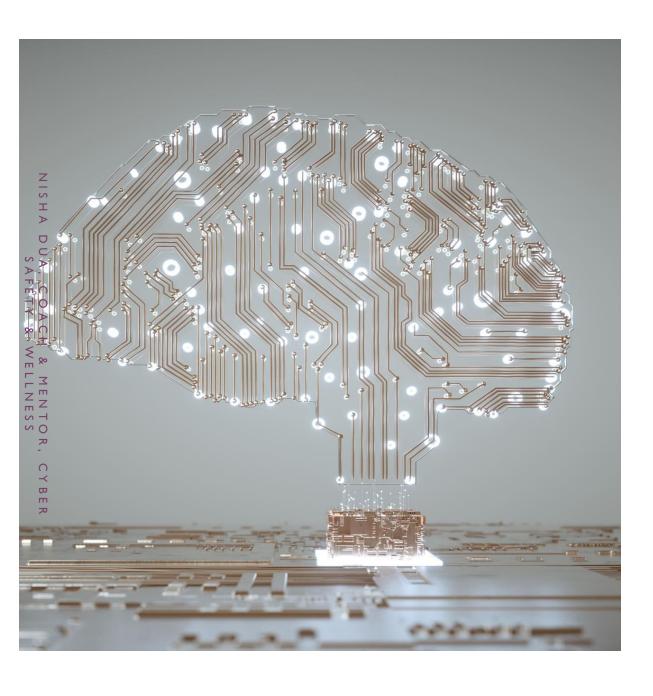
Low barriers of entry

Large target pool

False sense of complacency by the users

Sophisticated technology tools

Al tools being used to fuel/accelerate crimes



ARTIFICIAL INTELLIGENCE (AI)

When computers and machines are trained to learn, understand, think and take decisions like humans, very precisely in nano seconds, leaving humans behind.

NISHA DUA, CO, SAFETY

Cyber Crime Has Evolved Using Al











AI powered phishing

Deepfakes & voice cloning Automated attacks

Social Engineering made smart Data Analysis for targeting



Safeguarding Personal & Professional Information

Personal Safety



- Keep Geo Location off
- Control App Permissions
- Use Strong Passwords
- Set 2 Factor Authentication with logingalert notifications
- Avoid Public Wifi
- Avoid Juice Jacking
- Don't Participate in Online Challenges
- Recheck Privacy Settings
- Avoid Clicking Unknown Links

Your data in Maps

N

Home and work addresses

Your home and work addresses are used to personalise your experiences across Google products, and to show you more relevant ads.



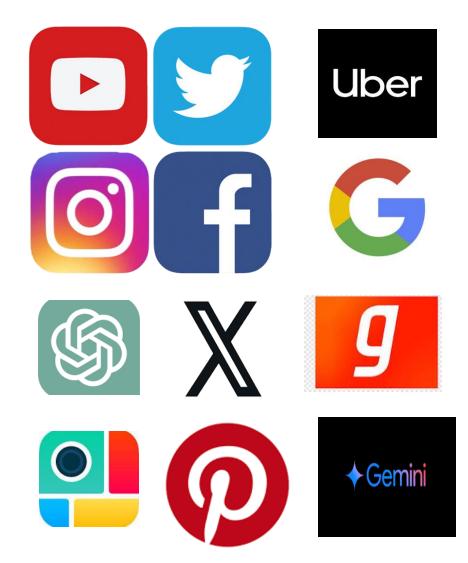


Location History

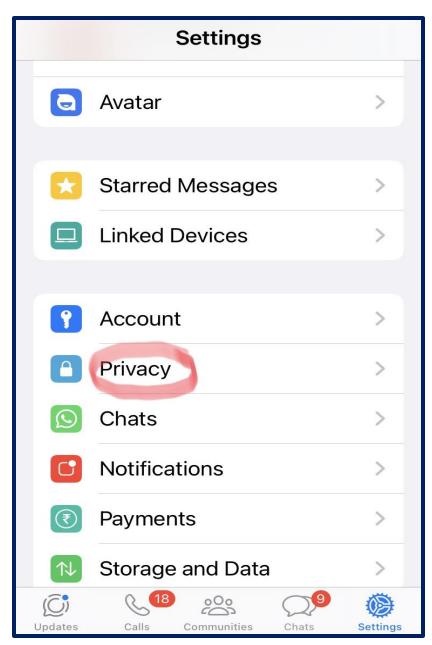


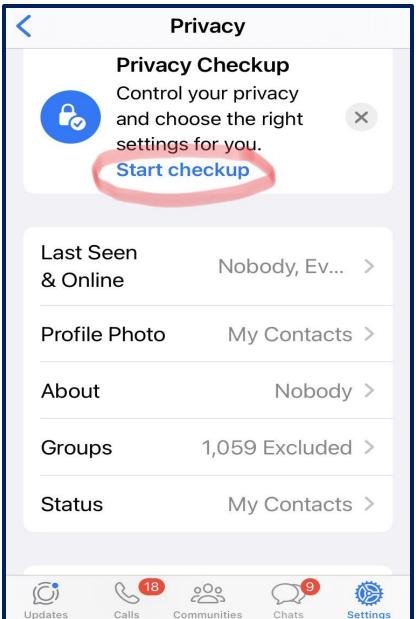
Saves where you go with your devices, even when you aren't using a specific Google service, to give you personalised maps,

Privacy?



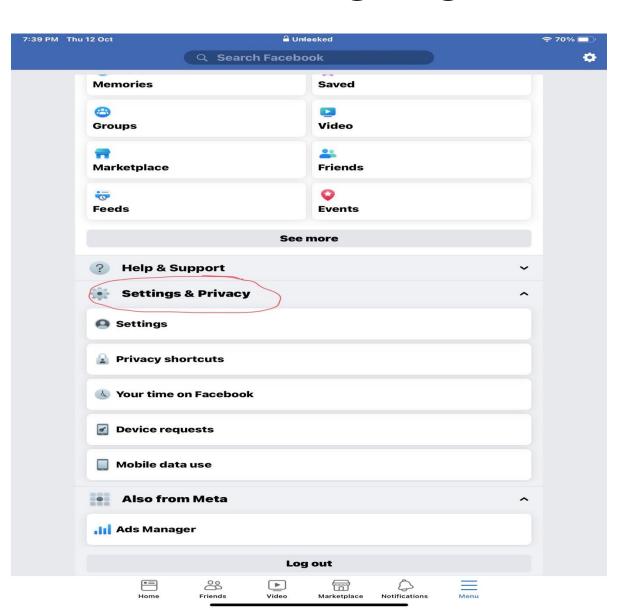
Privacy Settings on WhatsApp

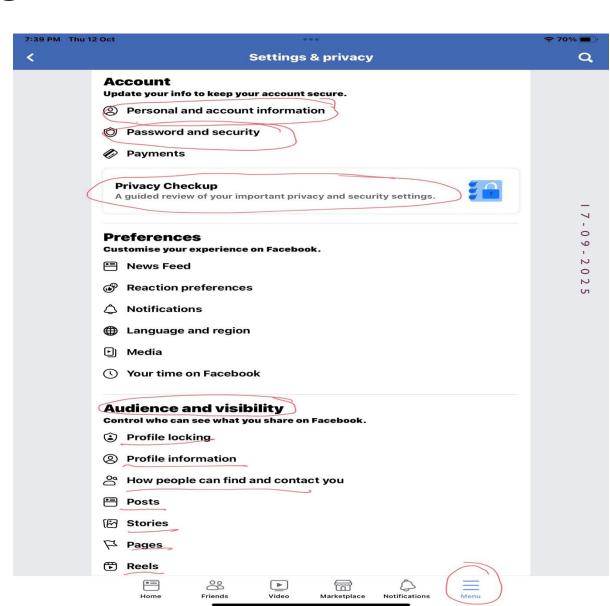




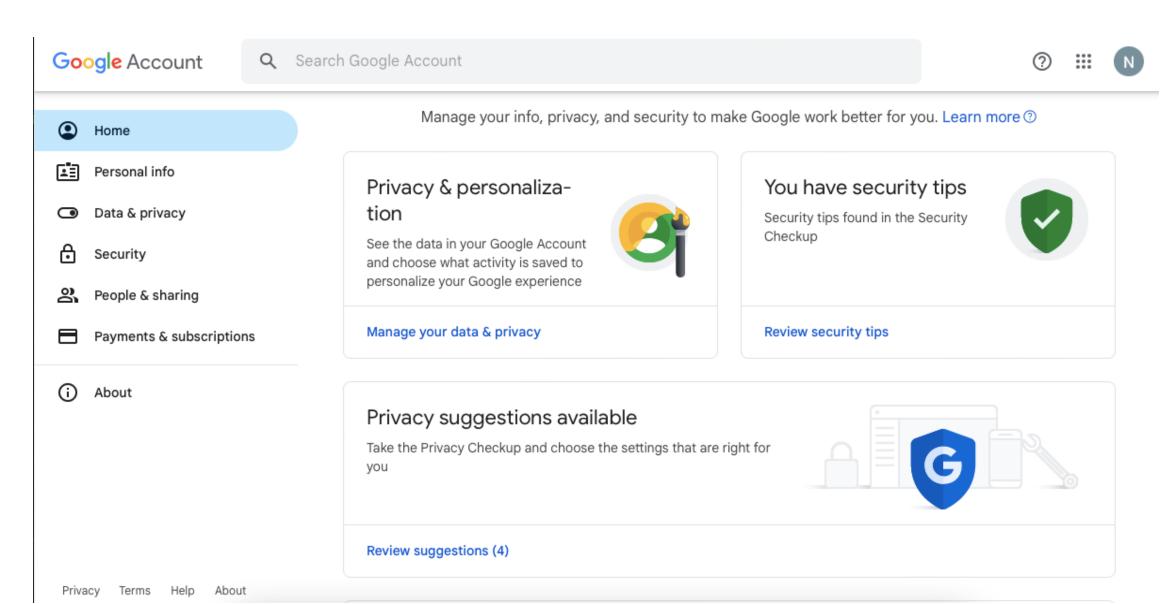


Managing Settings on Facebook





Managing Setting on Google Account



Digital Arrest - Modern Day Scam



DON'T GET TRAPPED

What's a 'digital arrest' scam?



- Scammers pose as police or officials
- Victims are threatened and kept online
- Email, SMS, or WhatsApp used

RED FLAGS

S O R

- Unknown caller
- Threats of arrest
- Requests for money

DON'T PANIC. VERIFY.IDENTITY

Report to 1930 (Cyber Crime Helpline)

Demand money to clear your name.



Claim that Aadhaar card, bank account or parcel linked to crimes like narcotics, terrorism, money laundering

Cybercriminals profile & confine victims to their homes under digital arrest.



Generate fear by posing as law enforcement officers using Algenerated voices or video technology.

Safety Tips

THINKING	TALKING	SHARING	TRANSFERING	EDUCATING
Stay calm, apply logic	Do not engage, hangup & call helpline	Never share Aadhar Pan, OTP, Bank Details	Do not transfer money	Educate children, elderly members

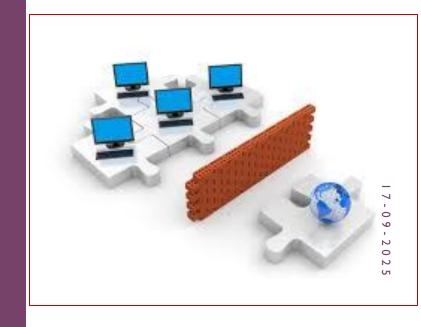


Schools are Easy Targets



School Boundary - Physical

EASY
ACCESS
&
CONTROL



School Boundary-Firewall (Technical)

Source: freepik.com

Attacks on Systems & Data



Cyber Attacks in Schools

- Cyber Invasion
- Data Theft (Social Engineering)
- Ransomware Attacks
- Website Hacking/Defacing
- Impersonation Fake / Inappropriate Messages
- Blackmail
- Fake News



Student Data is very Valuable & Sensitive

- Personal Identifiable Information (PII)
- Family Details
- Academic Information
- Testing / Performance Data
- Health Details
- Behavioral Details

Why This Matters Most For Educators

- Trust being exploited
- Lack of Awareness & Skills
- Weaker cyber security protections & protocols
- Paucity of Funds
- Limited/Untrained IT Personnel
- May use untested / less cost technologies and data sharing (cloud) platforms
- Human Error
- Free / Pirated Softwares

SAFEGUARDS

SAFEGUARDS

Secure Learning Platforms		
Secure Login Credentials		
Secure Cloud & Data Sharing Platforms		
Download Trusted Learning Apps		
Password Protected Files		
2 Factor Authentication	ΔI	
Original Software		
Updated Anti Virus		

SAFEGUARDS CONTD..

Protect Personal Details

Blur Names & Faces

Beware of Malicious Links

Avoid 3rd Party Apps

Create Awareness at all Levels

Appoint Responsible Security Coordinator

Verify & Then Trust

Vetting vendors – trusted and credible vendors for computer lab, website, LMS, data sharing platforms

BUILDING THE CULTURE OF CYBER SAFETY ...

Invest in developing skills of the workforce at all levels

Conduct Activities and Integrate Digital Citizenship and Online Safety in all departments

Associate with experts/organisations who can provide guidance and support.

Reporting...

- **❖Social Reporting**
- Platform Reporting
- Legal/Formal Reporting

❖File a formal complaint www.cybercrime.gov.in❖Call 1930

♦ CYBER SAFETY CELLS ♦ CHILD LINE Help Line – e Box



साइबर स्वच्छता केन्द्र

CYBER SWACHHTA KENDRA

Botnet Cleaning and Malware Analysis Centre



Ministry of Electronics and Information Technology Government of India

English | हिन्दी

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Cyber Swachhta Kendra

The "Cyber Swachhta Kendra" (Botnet Cleaning and Malware Analysis Centre) is a part of the Government of India's Digital India initiative under the Ministry of Electronics and Information Technology (MeitY) to create a secure cyber space by detecting botnet infections in India and to notify, enable cleaning and securing systems of end users so as to prevent further infections. The "Cyber

Swachhta Kendra " (Botnet Cleaning and Malware Analysis Centre) is set up in accordance with the objectives of the "National

ZESS

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REFLECTION QUESTION...

We teach students how to stay safe in real world – don't talk to strangers, avoid dark lonely places, keep the door locked when alone....

But

Are we preparing them the same way to stay safe in the digital world? Or we leave them to learn and navigate the dark world of Internet by themselves?

Our Responsibilities:

- Be alert & aware
- Be a good role model
- Empower & educate

Prepare Students to Succeed in Digital Age

