



The Knowledge Bridge

Artificial Intelligence

An Introductory Perspective

&

Cyber Security

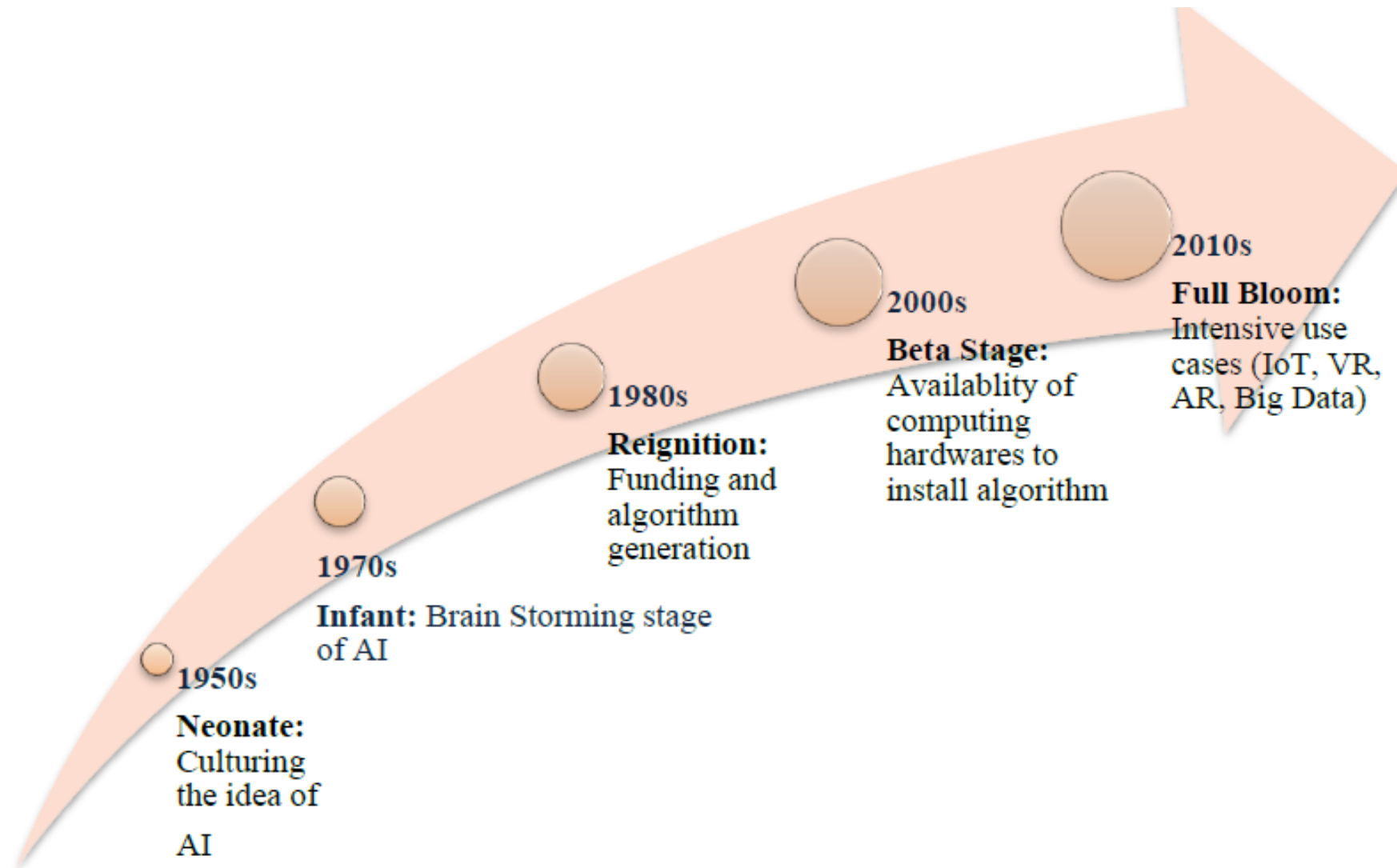
Protecting Digital Footprint

ARTIFICIAL INTELLIGENCE

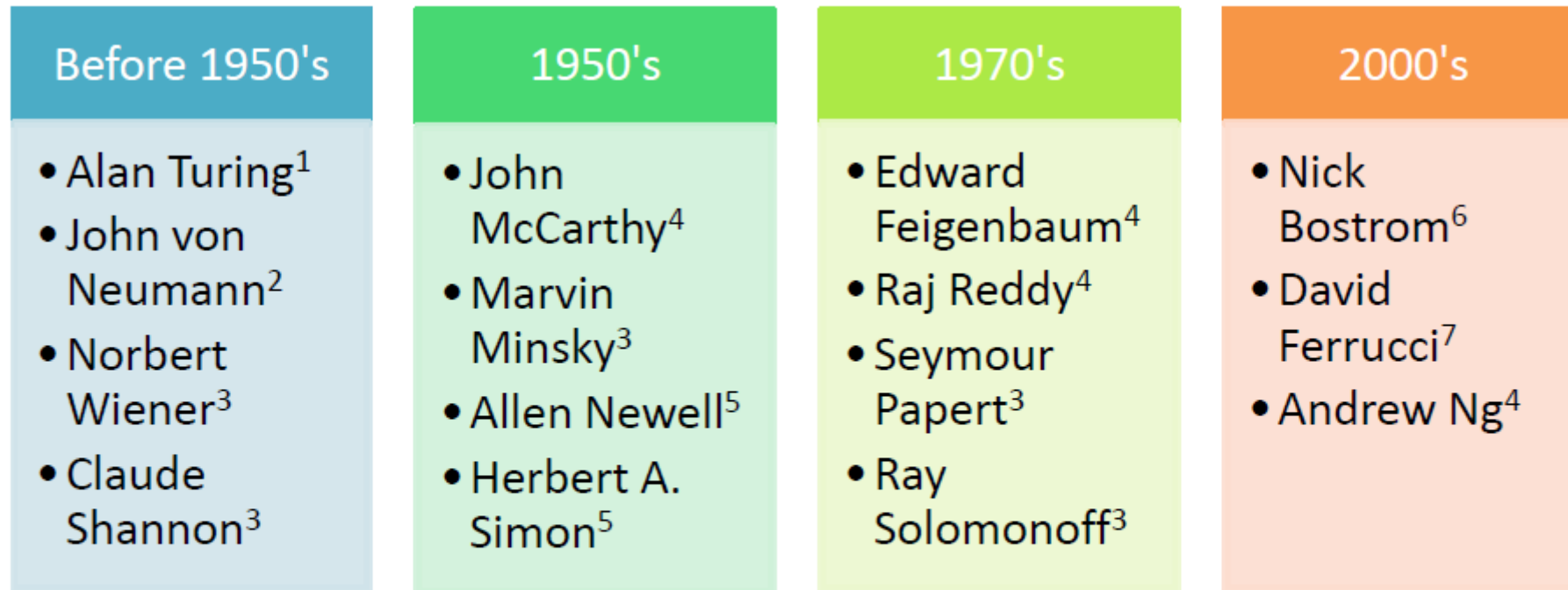
- Brief Historical Perspective – Evolution of the AI Revolution
- AI Technology Speak – Deep Learning
- Current Trends in AI Technology
- Big Data
- Generative AI & Large Language Models
- INDIA-AI Initiative
- AI Initiatives in India & Armed Forces



EVOLUTION OF ARTIFICIAL INTELLIGENCE

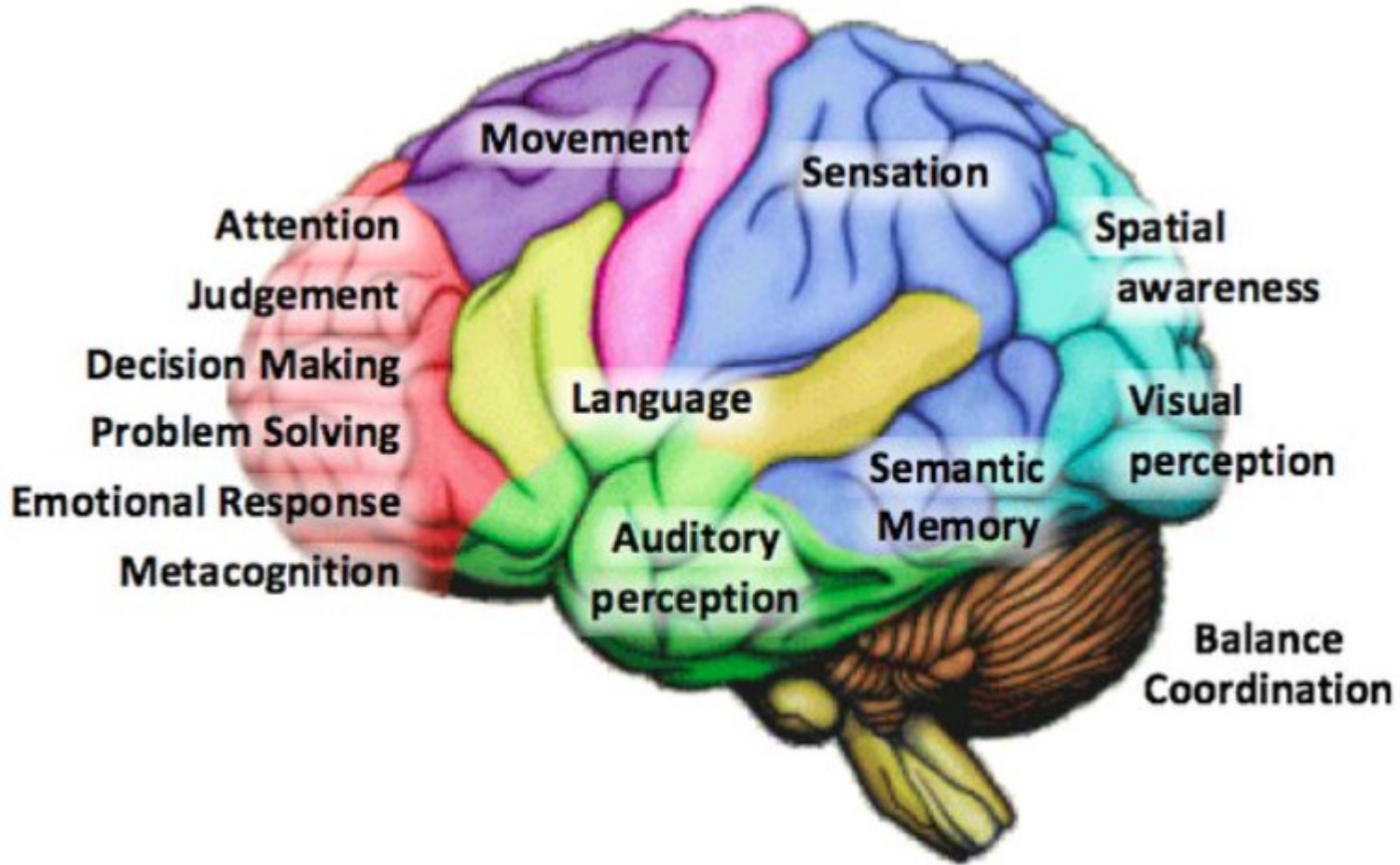


EVOLUTION OF ARTIFICIAL INTELLIGENCE

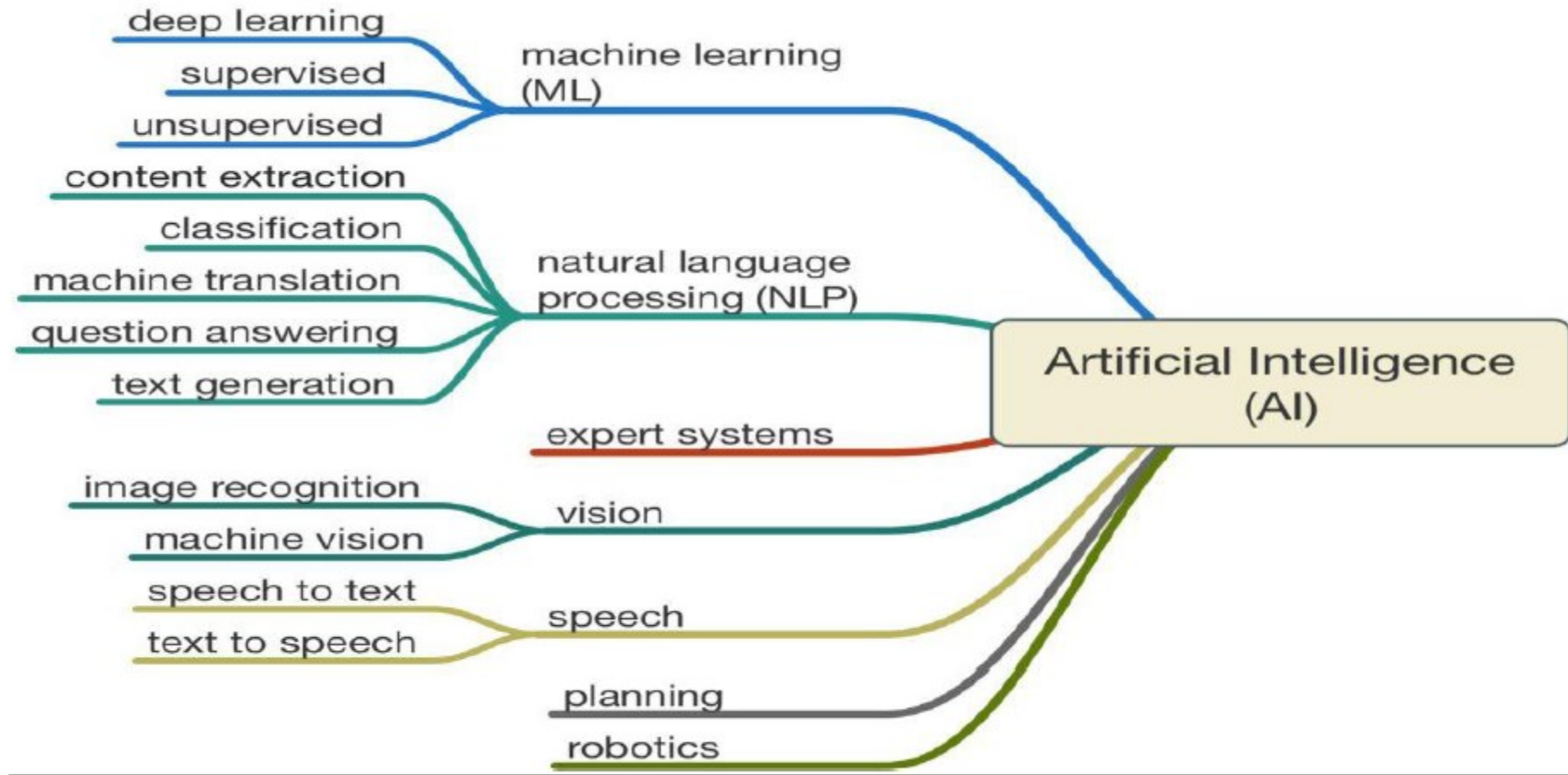


1. University of Manchester, 2. University of Berlin, 3. Massachusetts Institute of Technology, 4. Stanford University, 5. Carnegie Mellon University, Pittsburgh, 6. Oxford University, 7. International Business Machines Cooperation (IBM), New York

COGNITIVE SKILLS

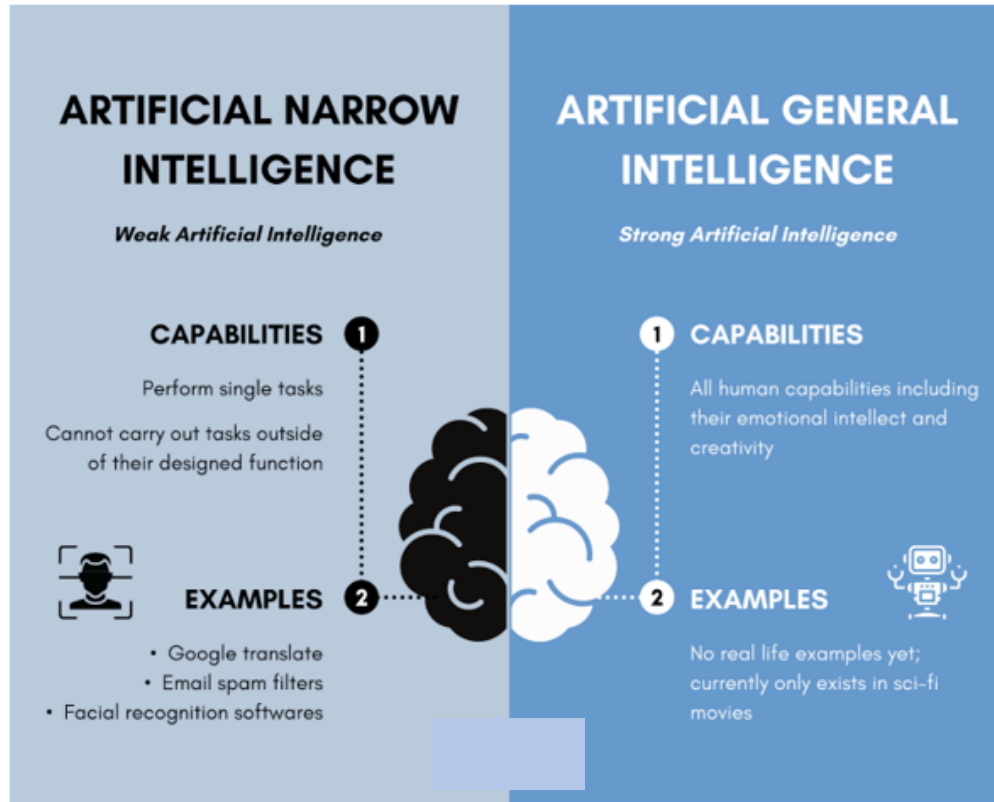


CONSTITUENTS OF ARTIFICIAL INTELLIGENCE



Source: Stanford University

TYPES OF ARTIFICIAL INTELLIGENCE



ARTIFICIAL INTELLIGENCE VS MACHINE LEARNING VS DEEP LEARNING

1 Artificial Intelligence

Development of smart systems and machines that can carry out tasks that typically require human intelligence

2 Machine Learning

Creates algorithms that can learn from data and make decisions based on patterns observed
Require human intervention when decision is incorrect

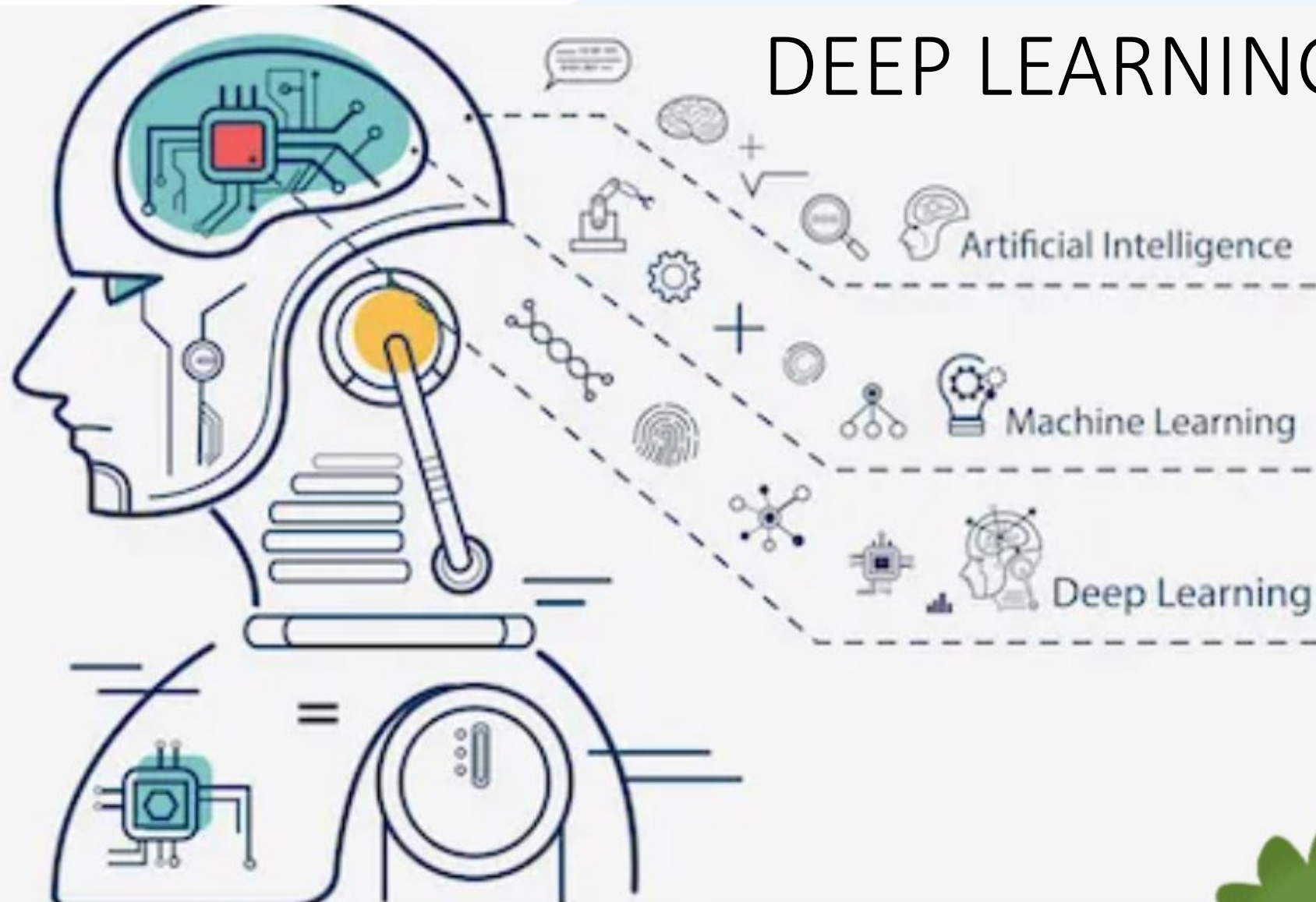
3 Deep Learning

Uses an artificial neural network to reach accurate conclusions without human intervention

MACHINE LEARNING VS DEEP LEARNING

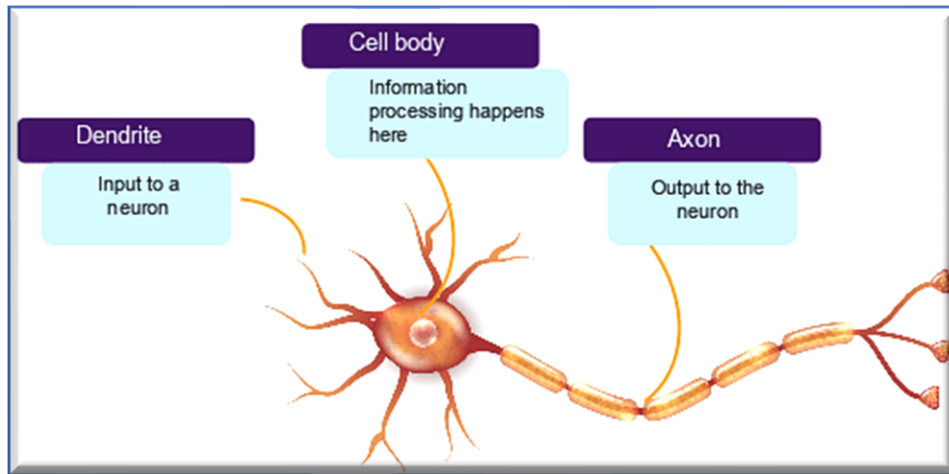
	MACHINE LEARNING	DEEP LEARNING
Approach	Requires structure data	Does not require structure data
Human Intervention	Requires human intervention for mistakes	Does not require human intervention for mistakes
Hardware	Can function on CPU	Requires GPU / significant computing power
Time	Takes seconds to hours	Takes weeks
Uses	Forecasting, predicting and other simple applications	More complex applications like autonomous vehicles

DEEP LEARNING

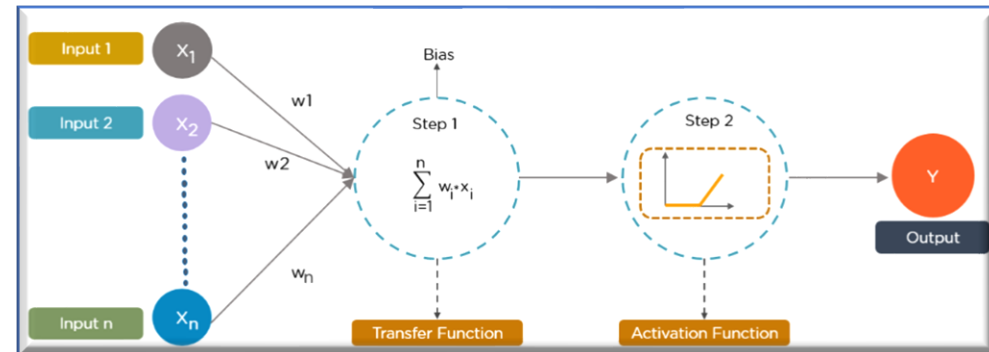
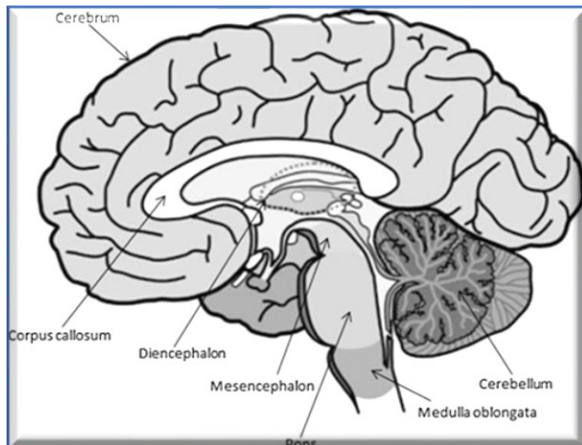
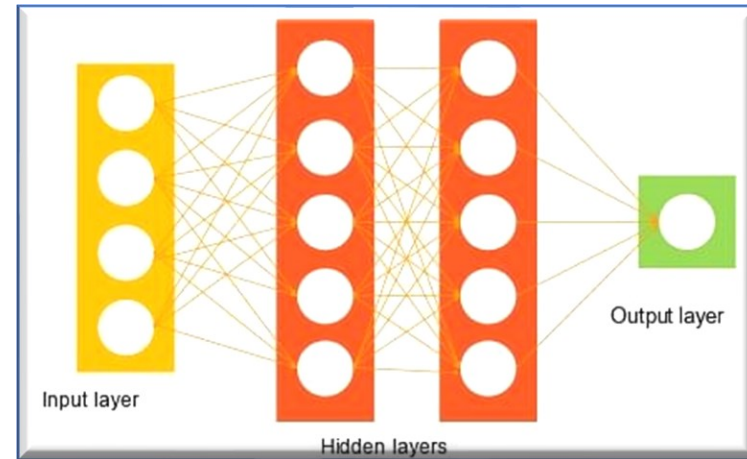


NEURAL NETWORKS

NEURON



ANN



AI TRENDS – MACRO VIEW



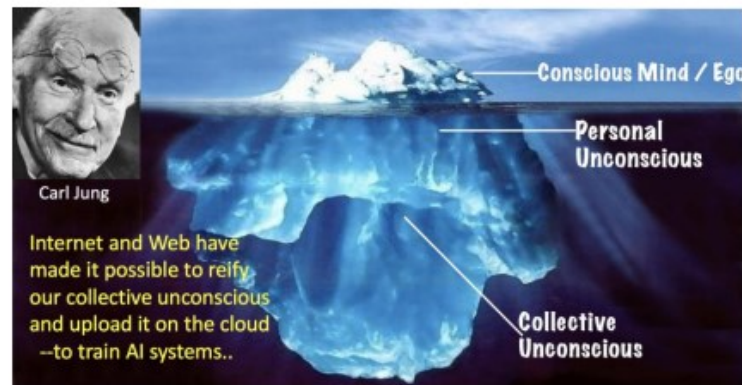
AI TRENDS – MICRO VIEW

From Explicit Knowledge to Tacit Knowledge Tasks

- AI systems used focus on explicit knowledge tasks (*those we not only do, but can articulate how we do them*)
 - Expert Systems, Chess..
- The focus has shifted to tacit knowledge tasks (*those we do, but can't articulate how we do them*)
 - Vision, speech, language, manipulation..

From reasoning from specifications to learning from data

- For explicit knowledge tasks, we could tell the computers how to solve them, and the computer would manage the search and reasoning
- For tacit knowledge tasks, we don't know how we solve them. So we have to depend on the computers to learn the "how" from data/examples
 - Became feasible with the advent of data capture/archival technologies like web, cell phones etc.



AI TRENDS – MICRO VIEW

From Deep & Narrow to Broad & Shallow

- AI systems used to have deep expertise in narrow domains
 - The old “expert systems”, Deep Blue for Chess; Alpha Go for Go, Alpha Fold for Protein Folding etc.
- Recent trend is to develop systems with broad expertise. But they tend to be shallow in their understanding
 - Large Language Models, Diffusion Models
- (Thinking in terms of BSAI vs. DNAI is more instructive than AGI vs AI..)

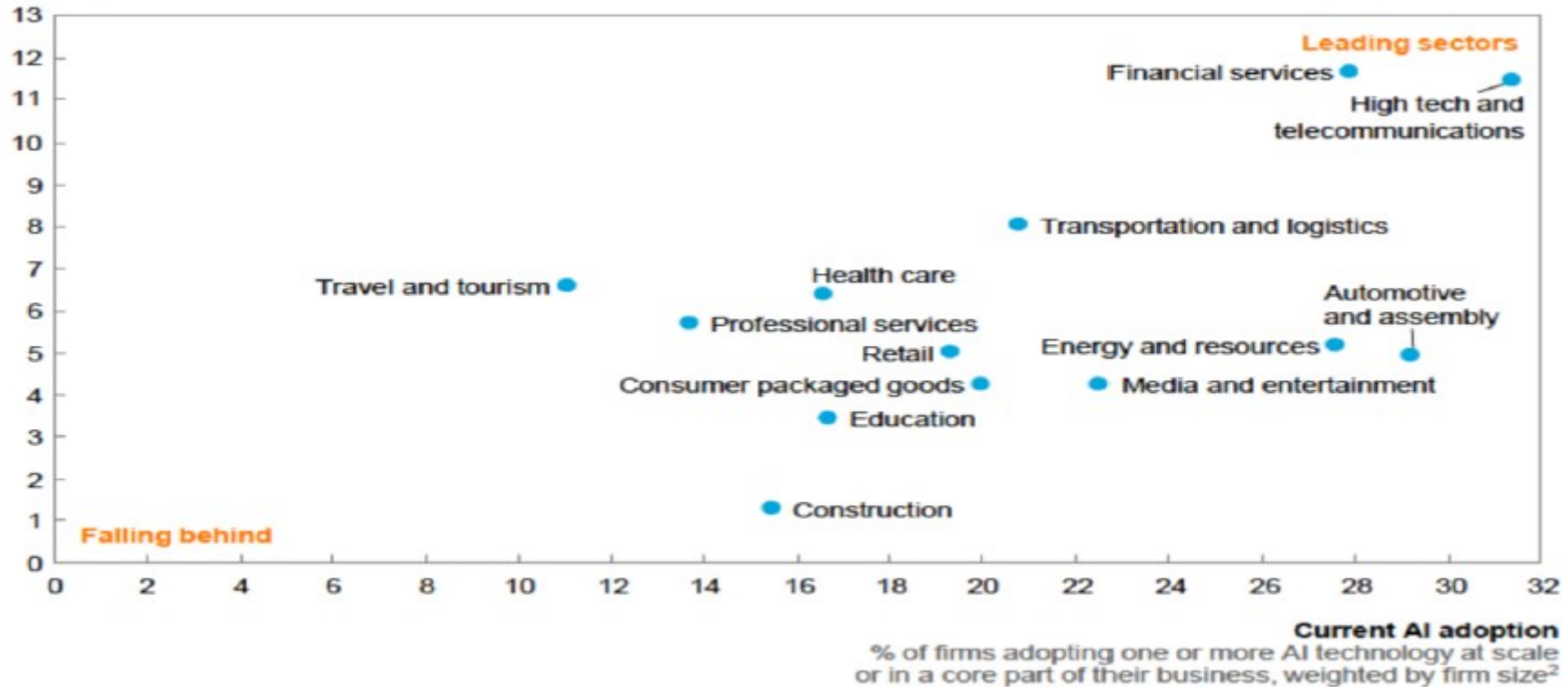
From Discriminative Classification to Generative Imagination

- AI systems used to focus on “identification” and “classification”
 - Is this a picture of a dog? Is this an x-ray of a malignant tumor? Is this a spam mail?
 - $P(\text{dog} | \text{Picture})$; $P(\text{tumor} | \text{x-ray})$;
 $P(\text{Spam} | \text{text})$
- Recent trend is to learn the “distribution of the objects”
 - Draw me a picture of a dog. Write me a spam mail
 - Learning $P(\text{tumor}, \text{x-ray})$ $P(\text{Spam}, \text{text})$

AI ADOPTION ACROSS SECTORS IN INDIA

Future AI demand trajectory¹

Average estimated % change in AI spending, next 3 years, weighted by firm size²



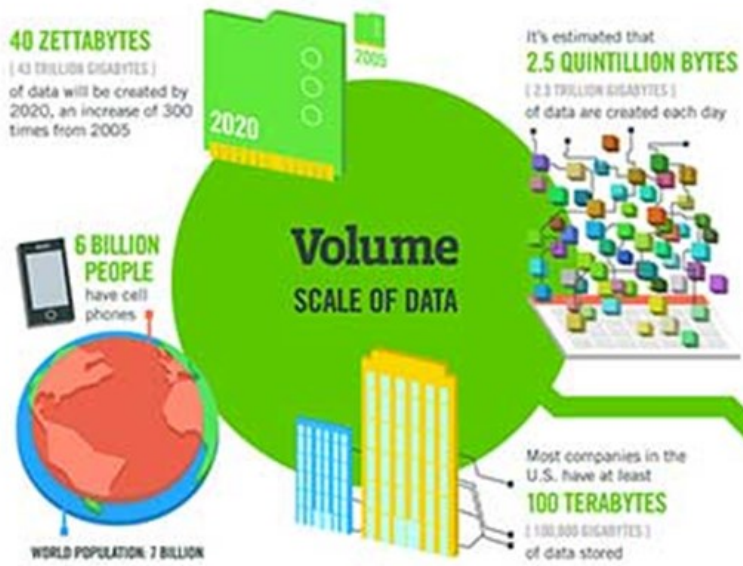
¹ Based on the midpoint of the range selected by the survey respondent.

² Results are weighted by firm size. See Appendix B for an explanation of the weighting methodology.

Source: NITI Aayog

BIG DATA





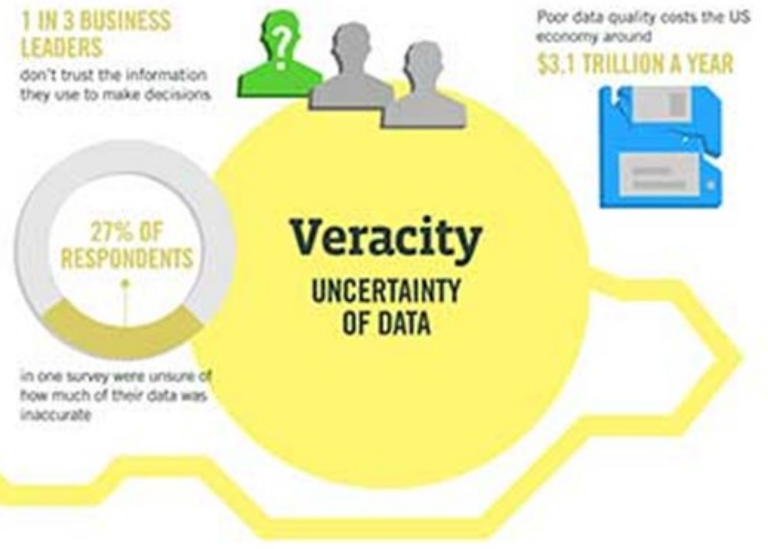
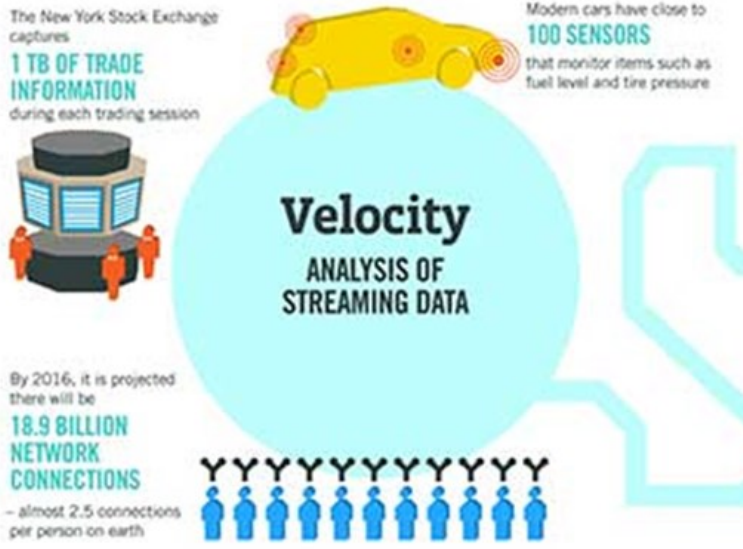
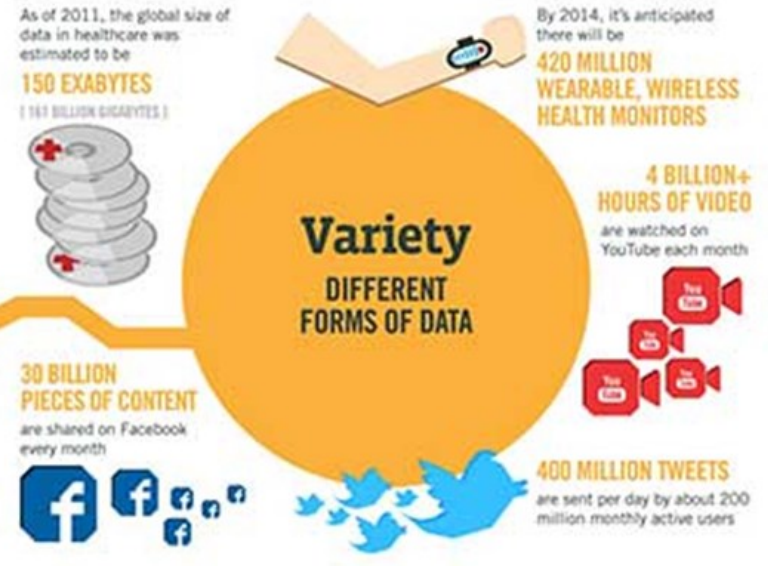
The FOUR V's of Big Data

From traffic patterns and music downloads to web history and medical records, data is recorded, stored, and analyzed to enable the technology and services that the world relies on every day. But what exactly is big data, and how can these massive amounts of data be used?

As a leader in the sector, IBM data scientists break big data into four dimensions: **Volume, Velocity, Variety and Veracity**.

Depending on the industry and organization, big data encompasses information from multiple internal and external sources such as transactions, social media, enterprise content, sensors and mobile devices. Companies can leverage data to adapt their products and services to better meet customer needs, optimize operations and infrastructure, and find new sources of revenue.

By 2015, **4.4 MILLION IT JOBS** will be created globally to support big data, with 1.9 million in the United States



Sources: McKinsey Global Institute, Terma, Cisco, Gartner, EMC, SAS, IBM, MEPTEC, GSA

BIG DATA – REAL LIFE EXAMPLES



NETFLIX

- User preferences
- **Personalized** recommendations.



GOOGLE

- Provide **personalized** experience.
- Predictive text in emails
- **Optimized navigation** directions



ZOMATO

- **Image processing**
- Extracting reviews
- Product optimization
- Build recommendation engines - **personalisation**

BIG DATA – SECTORAL EXAMPLES

- **HEALTHCARE** – SHIFT FOCUS FROM INTERVENTION TO PREVENTION to deliver more informed care choices, predict patient risk factors, and deliver better, patient-focused healthcare experience. **E.G. PREVENT LIFESTYLE DISEASES**
- **INVENTORY MANAGEMENT** – purchasing, distribution, order fulfillment, retail inventory management, and financial optimisation. **E.G. EXPENDABLE ITEMS /RUNNING SPARES PROCUREMENT**
- **PREVENTIVE MAINTENANCE** - better predict and resolve maintenance requirements, correlate quality issues to machine and environmental factors, reduce downtime, and improve quality. **EG MATERIAL FAILURE IN AVIATION ASSETS**
- **SUPPLY CHAIN MANAGEMENT** - Planning decisions to demand forecasting, distribution and replenishment, supply chain execution **E.G. WINTER STOCKING IN HIGH ALTITUDE AREAS**

BIG DATA IN MILITARY OPERATIONS

- **Tactical Level**

- Situational Awareness
- Decision Making

**(Sensors + Networks +
Information Systems Applications)**

- **Operational Level**

- Conventional Operations – Intelligence Surveillance and Reconnaissance (ISR) Grid
- Counter Insurgency/ Counter Terrorism Operations – Co-relation For Predictive Analysis

- **Strategic Level**

- Synergising **triad of Technical, Human Intelligence and Satellite Imagery**
- National Level – Data fusion for various Joint Intelligence Committees

- **CROSINT** – Crowd Sourced Int

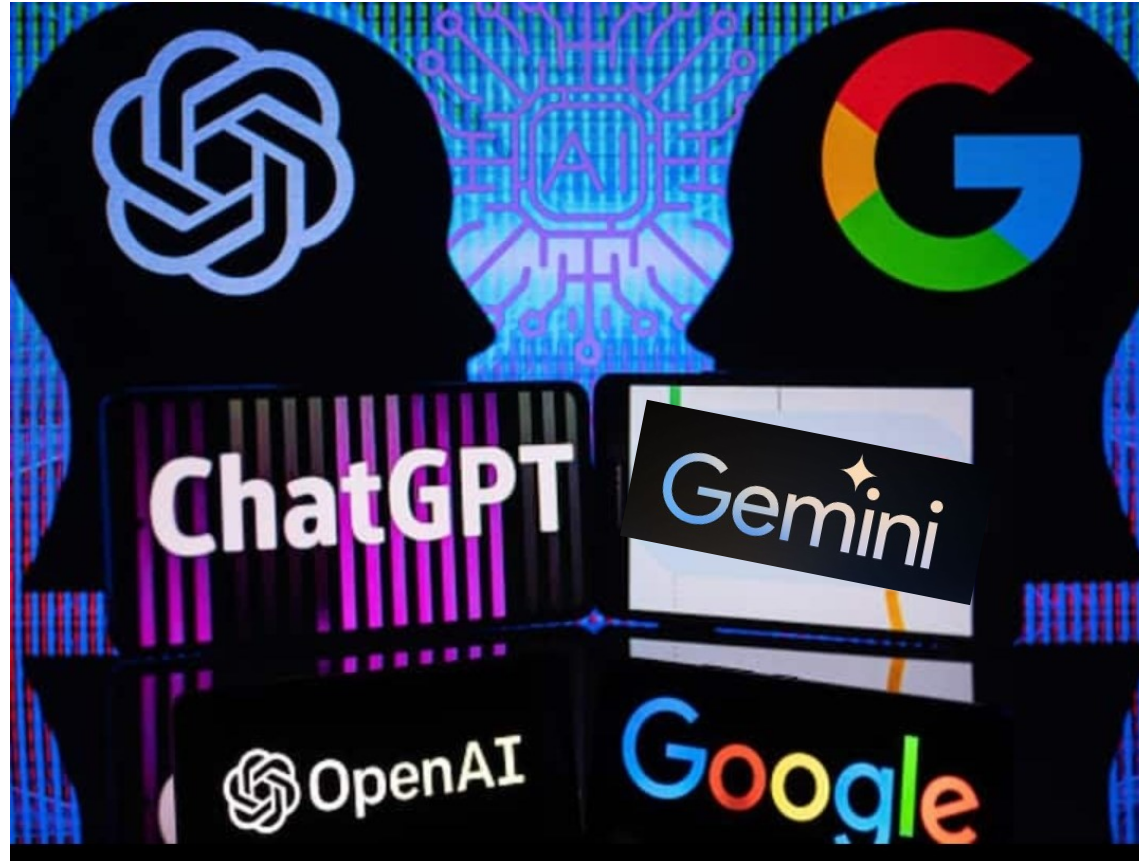
AI IN ISRAEL – HAMAS CONFLICT

- **The Alchemist** provides commanders in battle-field with real-time alerts of possible threats, sent directly to their handheld tablets
- **HASBORA - The Gospel** supports target analysis and identification. Gives targeting recommendations, thereafter finalized by human analysts
- **Depth of Wisdom** was deployed to map Gaza's tunnel network. Provides a "full picture of the network both above and below ground with details, such as the depth of the tunnels, their thickness and the nature of the routes"
- **Fire Weaver** Smart Trigger System for fire control
- **Clarity** – Anti – deepfakes

GENERATIVE AI (CHATBOTS) - HIGH TECH PLAGARISM TOOLS ?

USERS
MISPLACED
OPTIMISM

TECHIES
INFORMED
SCEPTICISM



LIMITATIONS OF GENERATIVE AI

Skill Set

- **Social Workers** – Empathy, Emotional Intelligence, Critical Thinking
- **Health Care Professionals** – Complex Decision Making, Empathy, Adapting to new situations
- **Teachers** – Creativity, Adaptability, Human Interaction
- **Scientists** – Creativity, Critical Thinking, Problem Solving
- **Lawyers** – Interpretation, Reasoning, Judgement

Tech

- **AI Hallucinations** - Inconsistent factual accuracy
- **Lack deductive/logical reasoning** - No cognitive architecture - epistemologically blind to what it knows it knows and its known unknowns
- **Misinformation Tool** - fake news
- **Not Search Plus**

COGNITIVE BIAS IN GENERATIVE AI

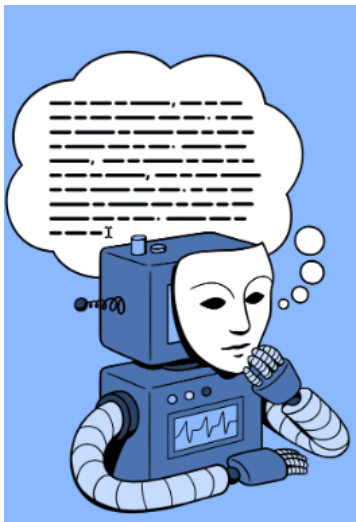
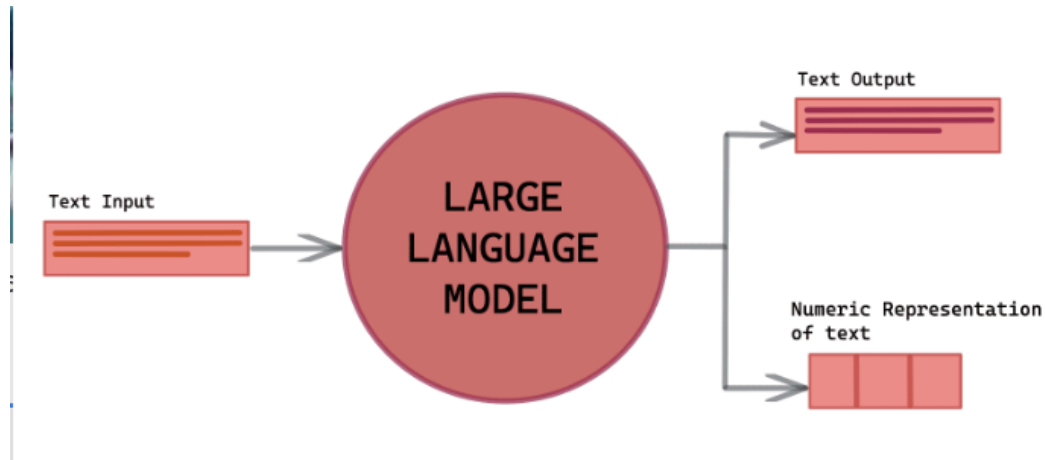
EXPECTATION



REALITY



LARGE LANGUAGE MODELS (LLM)



Large Language Model (LLM)

['lɑːrʒ 'lɑːŋ-ɡwɪj 'mə-dəl]

A deep learning algorithm that's equipped to summarize, translate, predict, and generate human-sounding text to convey ideas and concepts.

Models (LLMs) have revolutionized the field, enabling machines to understand a wide range of tasks. The core of LLMs lies in the concept of tokens, which are the building blocks for processing and representing text. In this post, we'll demystify tokens in LLMs and explore how they contribute to these remarkable models.

INDIA – AI INITIATIVE

- **Support for Computing and AI chips**
- **Marketplace for AI as a Service**
- **Funding for Startups**
- **Non-personal Datasets Platform**
- **IndiaAI FutureSkills**
- **Centre for Application Development**



<https://indiaai.gov.in/>

INDIA-AI INITIATIVE

The Safe & Trusted AI

This pillar aims to enable the implementation of Responsible AI projects

including the development of indigenous tools and frameworks that are trained on Indian Datasets for India's unique needs and challenges



AI REGULATION IN INDIA

THE ECONOMIC TIMES | tech

English Edition ▾ | Today's ePaper

The government is looking to frame a new law on artificial intelligence (AI) that will protect the interests of [news publishers](#) and [content creators](#) while also minimising [user harm](#), union minister for electronics and information technology Ashwini Vaishnaw told ET.

The new law will be “very balanced” as well as “strong on securing the rights and sharing the proceeds” among news publishers, content creators and AI-enabled technologies such as large language models (LLMs), “while keeping good space for innovation”, Vaishnaw added.

Exclusive | New AI law to secure rights of news publishers: Ashwini Vaishnaw

By Surabhi Agarwal & Aashish Aryan, ETtech • Last Updated: Apr 05, 2024, 08:03:00 AM IST

 FOLLOW US  SHARE  FONT SIZE  SAVE  PRINT  COMMENT

Synopsis

Global AI regulation discussions intensify as companies seek fair compensation for AI data training from publishers. EU leads with strict guidelines under AI Act. OpenAI claims fair use, NYT advocates for accountability in copyright law.

INDIA-AI INITIATIVE

IndiaAI Compute Capacity

A critical component of the Mission that aims to build AI compute infrastructure of **10,000 or more Graphics Processing Units (GPUs) through public-private partnership**

INDIA-AI INITIATIVE

The IndiaAI Datasets Platform

A vital component of the Mission, the unified data platform will be a **one-stop solution for seamless access to non-personal datasets to Indian Startups and Researchers**



INDIA-AI INITIATIVE

IndiaAIFutureSkills

A critical component conceptualised to:

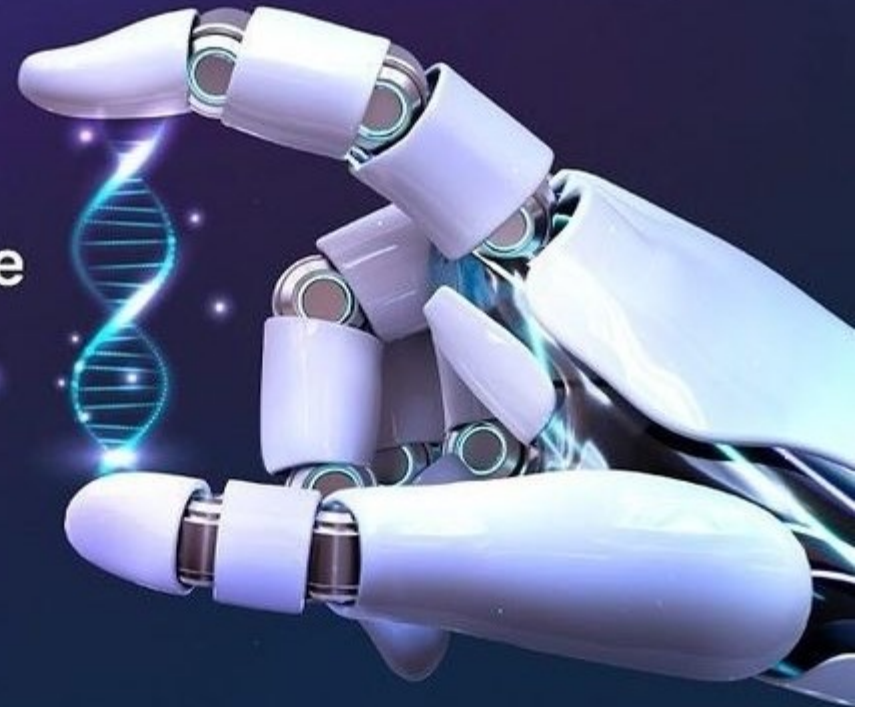
- Increase access to AI courses in Undergraduate, Masters-level and Ph.D programs
- Develop Data and AI Labs in Tier 2 and Tier 3 cities across India to impart foundational level courses

INDIA-AI INITIATIVE

The IndiaAI Innovation Centre

A component capturing India's social, cultural and linguistic diversity to undertake the development and deployment of:

- Indigenous Large Multimodal Models (LMMs)
- Domain-specific foundational models in critical sectors



INDIA-AI INITIATIVE

The IndiaAI Application Development Initiative

A critical facet of the Mission that will:

- Promote AI applications in critical sectors for problem statements sourced from Central Ministries, State Departments & other institutions
- Focus on developing, scaling & promoting adoption of impactful AI solutions with potential for catalysing large scale socio-economic transformation



HANOOMAN - GPT

Who

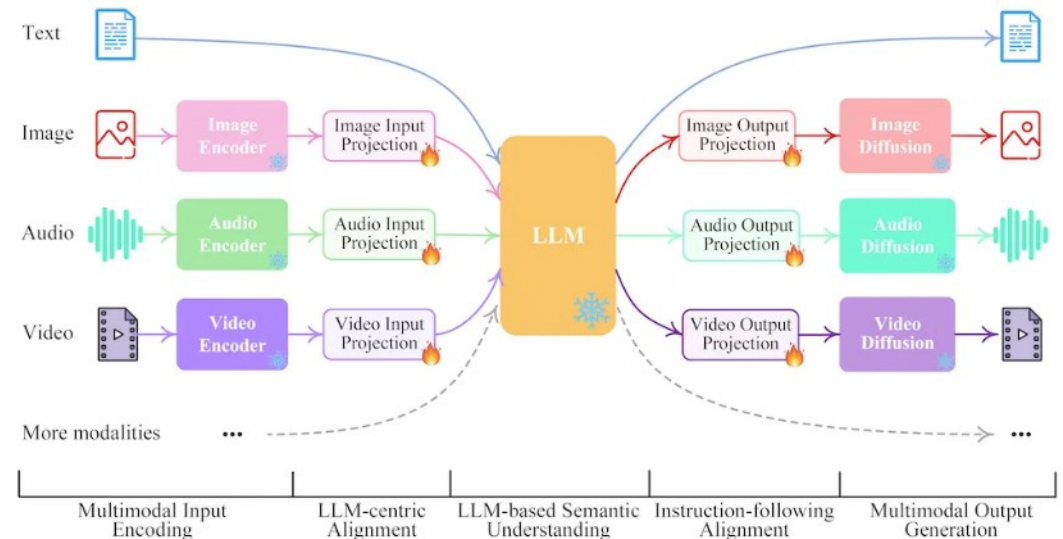
- **BharatGPT Research Group** - led by IIT Bombay along with 7 other elite Indian engineering institutes.
- **Backed by GOI Science Department**
- **In conjunction with Reliance's telecom and retail operations; Seetha Mahalaxmi Healthcare (SML)**

What

- **Series of Large Language Models (LLMs)** that can respond in 11 Indian languages like Hindi, Tamil, and Marathi, with plans to expand to more than 20 languages.
- **Multimodal AI tool**, which can generate text, speech, videos

Why - work in four fields, including health care, governance, financial services, and education.

When - Launch in 2024



MAJOR APPLICATION AREAS OF HANOOMAN - GPT

<u>GENERAL APPLICATION AREA</u>	<u>SPECIFIC APPLICATION</u>	<u>USE CASE</u>
HEALTHCARE	MAKE IT EASIER FOR DOCTORS AND PATIENTS TO KEEP RECORDS AND SUMMARISE THEM	CONVERSATIONS OF DOCTOR – PATIENT IN NATIVE LANGUAGES WILL BE RECORDED AND HANOOMAN WILL SUMMARISE THEM USING AUTOMATIC SPEECH SUMMARISATION
EDUCATION	SUPPORT TO RURAL SCHOOLS	ASSIST SCHOOL GOING CHILDREN IN RURAL AREAS WITH HOMEWORK, ESPECIALLY THOSE WHOSE PARENTS CANNOT ASSIST THEM
GOVERNANCE	ENHANCING CITIZEN ENGAGEMENT AND IMPROVING ACCESS TO GOVT SERVICES	AUTOMATE PROCESSES OF GOVT CUSTOMER SERVICE KENDRAS
FINANCIAL SERVICES	MAKING FINANCIAL PRODUCTS AND INFORMATION MORE ACCESSIBLE AND UNDERSTANDABLE FOR WIDER REACH	PERSONAL INSURANCE AND INVESTMENTS

INDIAN NAVY - GPT



Indian Navy Develops Own Version Of ChatGPT, Captain Kshitij Saxena Briefs About Design & Purpose


<https://youtu.be/7v3aTI9gUrw?si=L2ITyoauNMkYDUHx>




CHAT GPT – MILITARY APPLICATIONS

RUSSIA – UKRAINE WAR


← Tweet

 **Vikas Swarup** ✓
@VikasSwarup

Can AI solve the world's biggest conflict? I asked ChatGPT to come up with a mediation plan for the Russia-Ukraine War. This is what it came up with.

 The conflict between Russia and Ukraine is a complex and long-standing issue, and finding a solution that is acceptable to both parties is a challenging task. However, as an AI language model, I can suggest a possible mediation solution:

1. Negotiations: The first step towards resolving the conflict is through negotiations between the leaders of both countries. The negotiations should aim to find common ground and establish a framework for future cooperation.

 **Shashi Tharoor** ✓
@ShashiTharoor

Interesting initiative by @vikasswarup but as he knows, in conflicts leaders are irrational in ways beyond AI's comprehension! In this specific case I can think of several objections from both sides, mainly the Russians, to the ChatGPT formulation. But it's a great experiment!

KASHMIR

 **Om Karmalin** · Mar 10
Replying to @ShashiTharoor and @VikasSwarup

Tried the peace plan for #Kashmir with ChatGPT and the result as expected, is irrational as well. Point 3. Says Consider a shared Governance Model 😊

2. Initiate Dialogue and Negotiation: Both countries should engage in a constructive dialogue to find a mutually acceptable solution to the Kashmir dispute. A third-party mediator could facilitate the dialogue and negotiations.
3. Consider a Shared Governance Model: Both countries could consider a shared governance model for the

ISSUES

- **IRRATIONALITY OF HUMAN BRAIN**
- **ARTIFICIAL STUPIDITY**
- **BEYOND LOGIC / REASONING**

AI - THE LARGER ETHICAL ISSUE

NEW YORK TIMES – 03 MAY 2023

'The Godfather of A.I.' Leaves Google and Warns of Danger Ahead

For half a century, Geoffrey Hinton nurtured the technology at the heart of chatbots like ChatGPT. Now he worries it will cause serious harm.



BBC NEWS – 03 MAY 2023

'We need to take a step back'

In March, an open letter - co-signed by dozens of people in the AI field, including the tech billionaire Elon Musk - called for a pause on all developments more advanced than the current version of AI chatbot ChatGPT so robust safety measures could be designed and implemented.

Yoshua Bengio, another so-called godfather of AI, who along with Dr Hinton and Yann LeCun won the 2018 Turing Award for their work on deep learning, also signed the letter.

Mr Bengio wrote that it was because of the "unexpected acceleration" in AI systems that "we need to take a step back".

But Dr Hinton told the BBC that "in the shorter term" he thought AI would deliver many more benefits than risks, "so I don't think we should stop developing this stuff," he added.

SUGGESTED READING

Absorbing Emerging Technologies into the Indian Army: Artificial Intelligence—As Case Study

AKSHAT UPADHYAY

Introduction

Technologies, especially data-driven ones, have gradually occupied a central spot in everyday life. This effect has also percolated into the military with organisations attempting to acquire and absorb technologies to improve on a number of parameters such as speed, coordination, mobility, etc. But what does absorbing any technology into an organisation mean and what does it entail? Using a hypothetical examination of the absorption of Artificial Intelligence (AI) within the Indian Army, this paper attempts to eke out certain pragmatic policy lessons that may be utilised for a more clearer and robust understanding of the several issues that need to be addressed while absorbing technology within the military.

What are Critical and Emerging Technologies (CET)?

Despite the worldwide buzz around the term critical and emerging technologies (CET) or more commonly disruptive or niche technologies, there is, unfortunately, no real consensus on what exactly are these technologies. Several definitions abound for the term. While a section of academia defines CETs in terms of their characteristics i.e radical novelty, relatively fast growth, coherence, prominent

30 < SPRING 2023 < SCHOLAR WARRIOR

Lieutenant Colonel Akshat Upadhyay
CLAWS : SCHOLAR WARRIOR SPRING 2023 pages-44-53



<https://www.ddpmod.gov.in/artificial-intelligence-defence>



<https://indianarmy.nic.in/writereaddata/adb-documents/Compendium%20of%20Problem%20Definition%20Statement%202023.pdf>

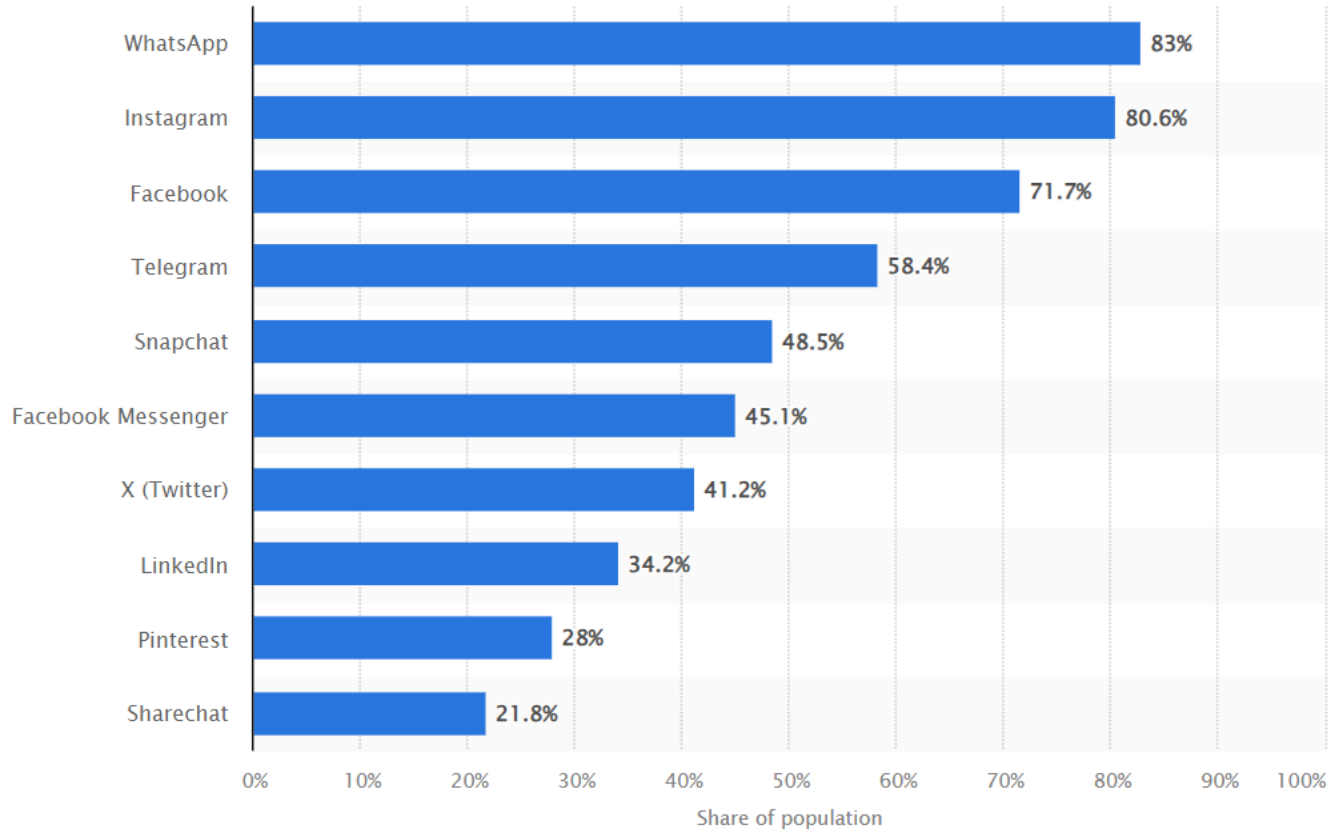
FOOD FOR FURTHER THOUGHT ON AI

Broad but shallow linguistic competence exhibited by ChatGPT is both frightening and exhilarating because we know that many of us are so easily taken by it. Used as assistance tools for humans, with appropriate guard rails, they can indeed improve our lives. The trick, as we have seen, is to resist the rushed deployment of such tools in autonomous modes and in end-user-facing applications.

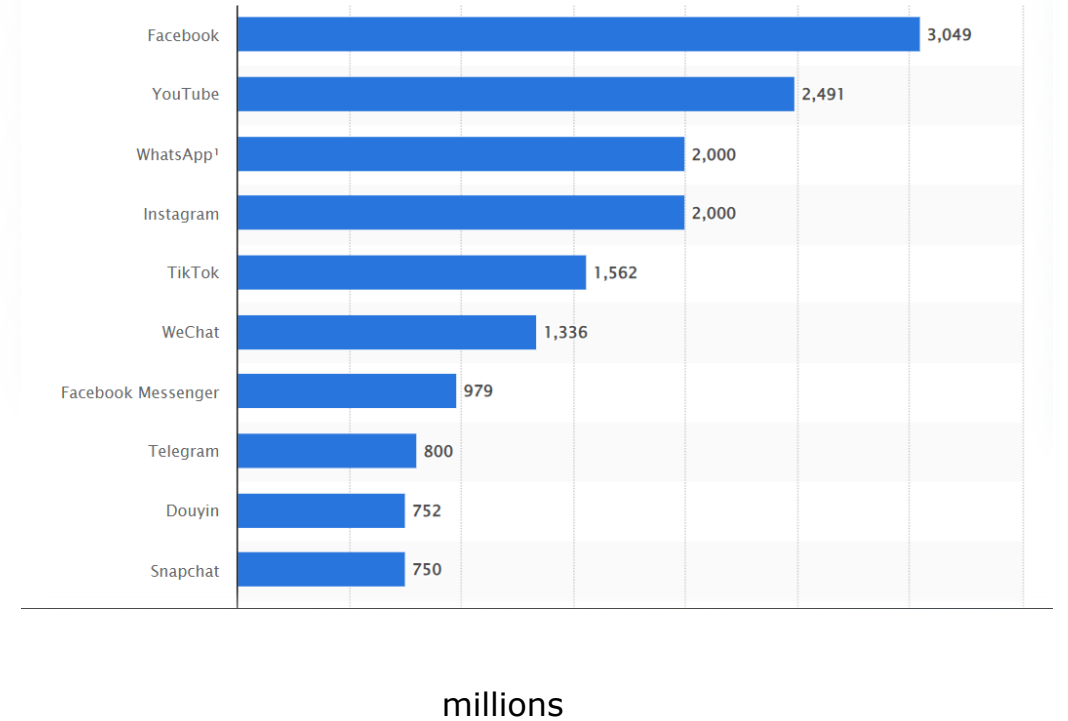
Be what may, to the extent that these alien intelligences force us to recalibrate our ideas of hallmarks of intelligence and avoid over-reliance on form and beauty as facile surrogates for content and character, it is perhaps not an entirely bad thing.

SOCIAL MEDIA PENETRATION

INDIA – Q3 2023



WORLD USERS – JAN 2024



SOCIAL NETWORK ANALYTICS (SNA)

- **Definition** - Gather and find meaning in data aggregated from social channels to support operational decisions — and measure the performance of actions based on those decisions through social media
- **Scope** - **Beyond numerical metrics** such as likes, follows, retweets, previews, clicks, and impressions gathered from individual channels
- **Methodology** - Data Retrieval is Keywords or topics based - through search queries or **web 'crawlers'** that span multiple channels across time zones and geographical regions
- **Backend Technology** - **Specifically designed software platforms** - similar to web search tools employed - **based on probability theory and statistical methods**
- **Analytics Process** - Fragments of returned text are loaded into a database, categorized and analyzed to derive operational deductions

SOCIAL NETWORK ANALYTICS

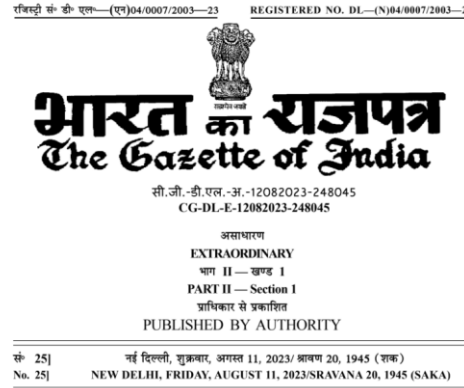
The screenshot shows a Twitter thread. The main tweet is by Rob Lee (@RALee85) and contains the following text: "Anatomy of an OPSEC failure. A Russian volunteer posted photos on VK in Sahy, Kherson Oblast with member of the GRU's 10th Spetsnaz Brigade. He left the location tagging on, which makes it very easy to geolocate the Grand Prix country club from the tiles. vk.com/milinfo.live?w=..."

Below the text, there are statistics: "2:29 AM · Jan 3, 2023 · 2.2M Views", "1,108 Retweets", "222 Quote Tweets", and "6,984 Likes".

The thread includes a video player showing a VK post. The VK post features a man in military gear, a Dora the Explorer cartoon character, and a photo of a large building with a blue tiled roof. The VK post also shows a location tag and a comment section.

<https://twitter.com/RALee85/status/1610018005462749190?s=20>

PERSONAL DATA PROTECTION REGULATION IN INDIA



THE DIGITAL PERSONAL DATA PROTECTION ACT, 2023 (No. 22 OF 2023)

[11th August, 2023.]

An Act to provide for the processing of digital personal data in a manner that recognises both the right of individuals to protect their personal data and the need to process such personal data for lawful purposes and for matters connected therewith or incidental thereto.



***Deepfake Technology:
The Rise of Synthetic
Realities***

WHEN AI MEETS THE REAL : MBIFL '24 – 10 FEB 2024



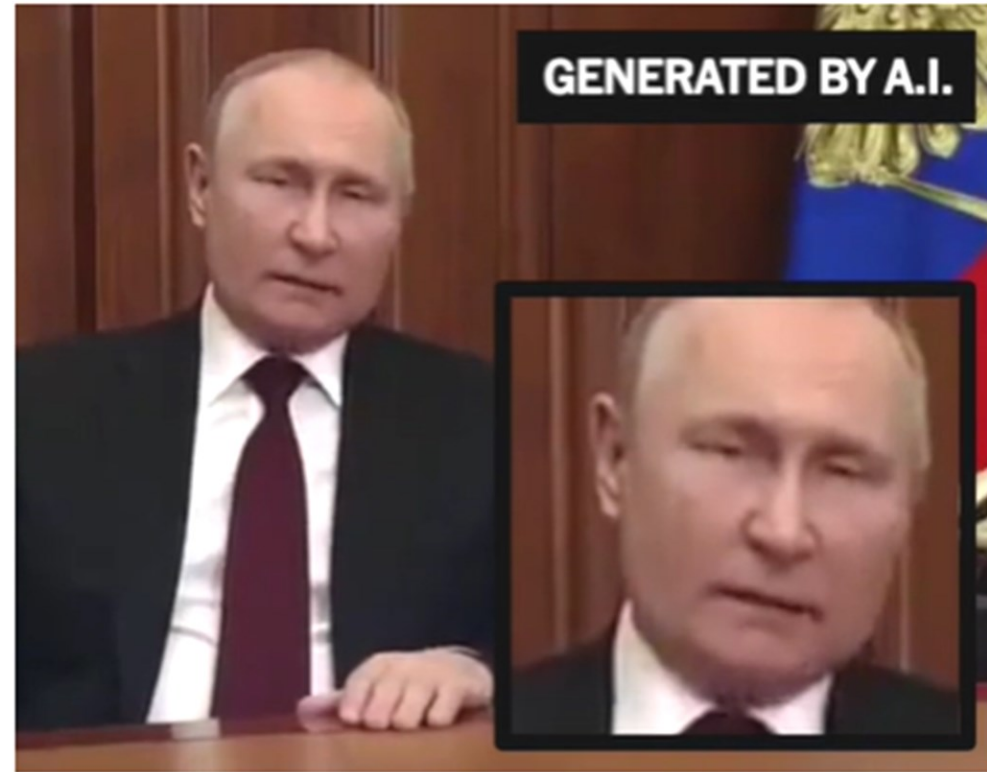
<https://youtu.be/1oxBIWXYWPg?si=K9QvZVjxonlw7zl>

REFINEMENT OF DEEPPFAKES

Spring 2022



June 2023



RECENT CYBER CRIME NEWS

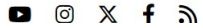
Wednesday, 3 April 2024

The Tribune

VOICE OF THE PEOPLE

ਯੰਮਾਬੀ ਟ੍ਰਿਬਿਊਨ ਦੈਨਿਕ ਟ੍ਰਿਬਿਊਨ

Follow Us



In two days, 30 cyber thugs held by Nuh police; 50 phones seized

Tribune News Service

Gurugram, March 31

The Nuh police claimed to have arrested 30 cyber criminals following two-day special raids. The suspects were marked using the Pratibimb app and special teams, led by Nuh SP Narendra Bijarnia, carried out raids and recovered 50 mobile phones and 90 fake SIM cards from them.

Cases have been registered under relevant sections at the Nuh Cyber police station. The suspects used to cheat people online by adopting methods like purchasing goods online on the basis of fake documents, fake social media profiles, fake bank accounts, sextortion, giving tempting ads for purchasing animals, etc.

The Nuh police have arrested 150 cyber criminals in the first three months of 2024. Inspector Vimal Rai, in-charge, cybercrime police station, said: "We managed to identify the suspects through the app which tracked frauds committed by them across the country. A special campaign was conducted on Saturday and Sunday which involved the entire force."

Targeted people across country

We managed to identify the suspects through an application which tracked frauds committed by them across the country. We are verifying their crime records and will get in touch with the state police concerned where they have carried out frauds. Most of the suspects have numerous frauds to their credit. — Inspector Vimal Rai, in-charge, NuH cybercrime police station



RECENT CYBER CRIME NEWS



inshorts

Karnataka Witnesses Surge in Cybercrimes

Karnataka witnesses a surge in cybercrimes, with citizens losing Rs 465 crore in 2023, averaging Rs 1.27 crore daily, as per CID data. Bengaluru reported 17,623 cases out of 21,868 statewide. Law enforcement anticipates further increase, emphasizing evolving tactics of fraudsters. Awareness campaigns aim to educate citizens about cybercrimes and encourage reporting.

swipe left for more at News Karnataka / 1 day ago



inshorts

Cybercrime cases in Mumbai increases with AI voice scam

Cybercriminals now replicate children's voices with artificial intelligence (AI) to fool parents into believing that their children are being arrested. They take advantage of parents' natural tendencies, causing unintentional payments before the scam is discovered. Law enforcement issued a warning that thieves are using voice recordings taken from social media.

swipe left for more at Mumbai Live / 4 days ago



inshorts

Mumbai Crime Branch Arrests 7 in IPL Ticket Scam

The operation culminated in the arrest of seven individuals allegedly involved in orchestrating a sophisticated scheme to sell counterfeit tickets online. The successful bust of this elaborate ticket scam underscores the Mumbai crime branch's commitment to combatting cybercrime and protecting consumers from fraudulent activities.

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राष्ट्रीय साइबर अपराध रिपोर्टिंग पोर्टल

National Cyber Crime Reporting Portal

Indian Cyber Crime Coordination Centre

CYBER DIGEST

PREPARED BY
INDIAN CYBER CRIME COORDINATION CENTRE
MINISTRY OF HOME AFFAIRS

28th March 2024

FOR MORE INFO

HELPLINE NUMBER 1930
WWW.CYBERCRIME.GOV.IN
FOLLOW @CYBERDOST

National

S. No.	News	Source
1.	Gurugram Police arrested 12 cyber criminals over the last three months were found to be involved in 4,995 cybercrime cases	Times of India
2.	Haryana Police busted cyber scam; 6 inter-state thugs arrested for cheating thousands	Yes Punjab
3.	The city Police arrested two cyber fraudsters who acted as touts as part of an international job racket	Times of India
4.	Rising cyber fraud hits Pune: victims lose crores in online scams	Pune Pulse
5.	Cyber Crime Branch arrested conman from Ghaziabad running fake insurance racket	The Hindu
6.	Economic Offence Wing of Odisha police arrested a woman in Rs 2 crore fraud case	LatestLY
7.	lions of ads, millions of advertiser accounts removed: How Google is fighting against online fraud ads	Times of India
8.	अंतरराष्ट्रीय साइबर धोखाधड़ी गिरोह में शामिल दंपती को पुलिस ने हैदराबाद से किया गिरफ्तार	Prabhat Khabar
9.	चार साइबर आरोपियों को पुलिस ने किया गिरफ्तार	Hindustan Times

<https://cybercrime.gov.in/Webform/dailyDigest.aspx>

COMPUTER SAFETY TIPS

COMPUTER SAFETY TIPS

- Always download applications/ software from trusted sources
- Regularly update Operating System, Applications and Anti-Virus software of the system
- Ensure backup of important data/files/ documents at regular intervals
- Lock the computer screen when not in use
- Always keep the computer firewall "ON"

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COMPUTER SAFETY TIPS

- Use account with limited privileges on systems
- Always insist on using genuine/ licensed software applications
- Scan all the files/contents downloaded from websites, e-mails or USBs
- Uninstall unnecessary programs or software

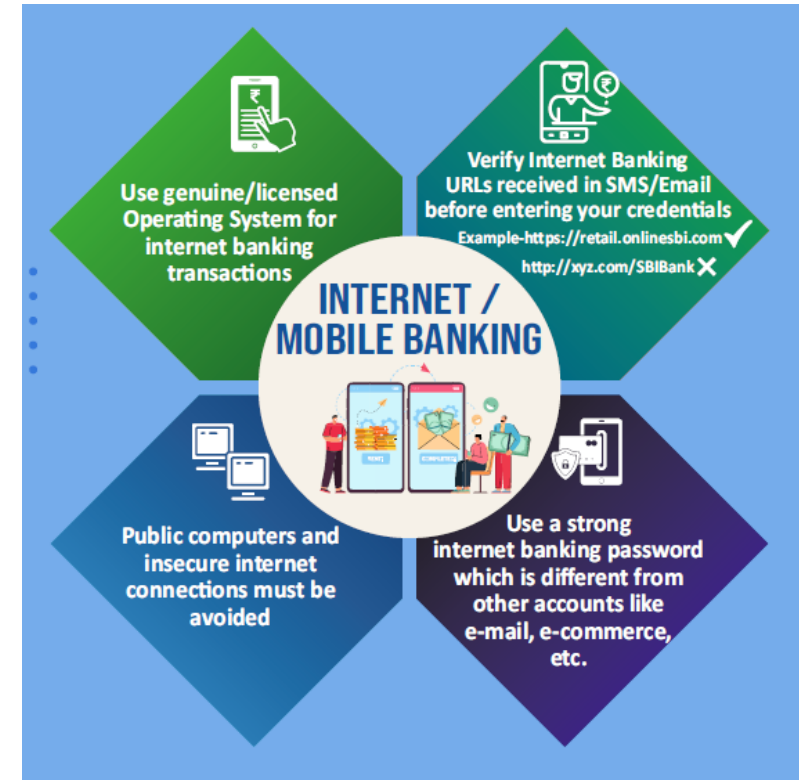
7

COMPUTER SAFETY TIPS

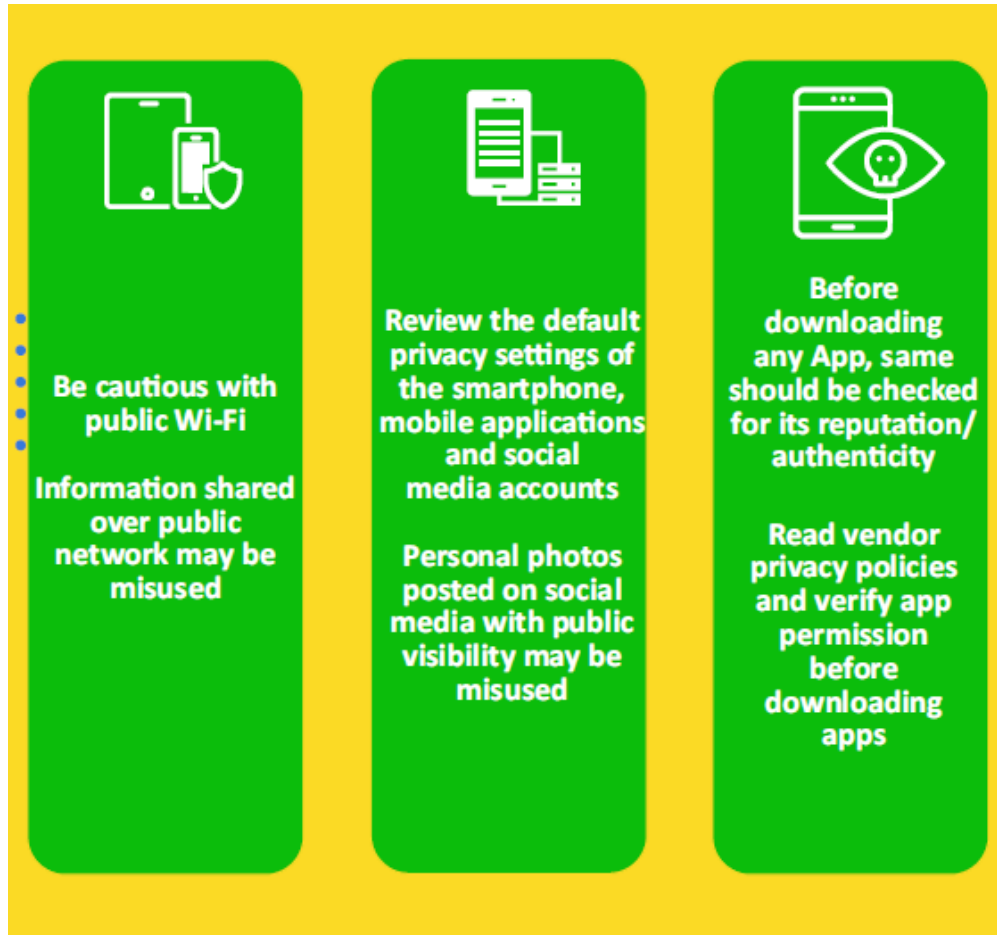
- Use "Task Manager" to identify any unwanted programs running on the computer system
- Access to servers should be allowed via Multi-Factor Authentication (MFA)
- Disable Remote Desktop Connection and network file sharing, when not in use
- Set Operating System update settings to "Auto-Download" option for regular updates

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FINANCIAL TRANSACTIONS – SAFE PRACTICES

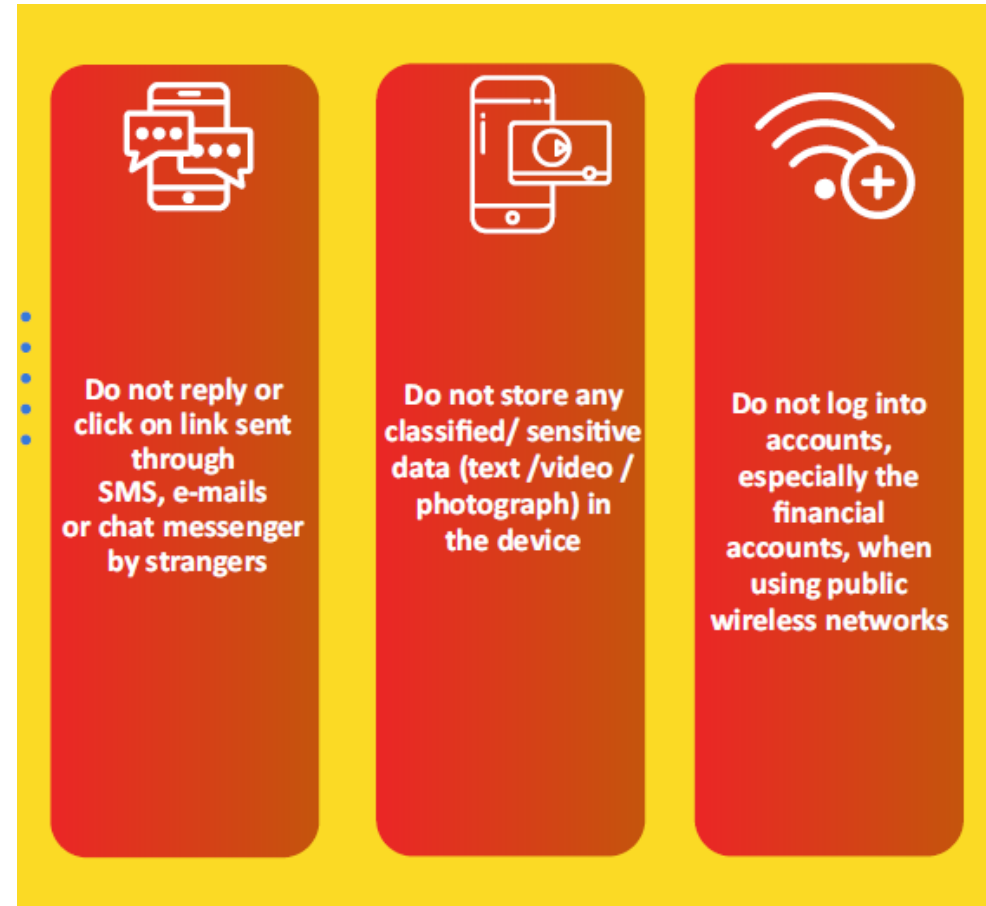


MOBILE PHONE SAFETY



The first panel features an icon of a smartphone and a laptop with a shield. The second panel features an icon of a smartphone and a document. The third panel features an icon of a smartphone with an eye and a brain.

- **Be cautious with public Wi-Fi**
Information shared over public network may be misused
- **Review the default privacy settings of the smartphone, mobile applications and social media accounts**
Personal photos posted on social media with public visibility may be misused
- **Before downloading any App, same should be checked for its reputation/ authenticity**
Read vendor privacy policies and verify app permission before downloading apps



The first panel features an icon of a smartphone with speech bubbles. The second panel features an icon of a smartphone with a play button. The third panel features an icon of a Wi-Fi signal with a plus sign.

- **Do not reply or click on link sent through SMS, e-mails or chat messenger by strangers**
- **Do not store any classified/ sensitive data (text /video / photograph) in the device**
- **Do not log into accounts, especially the financial accounts, when using public wireless networks**

MALWARE PROTECTION

Scan USBs, Files on your computer regularly or before use. Disable USB devices if not needed

Use Licensed Version of Operating Systems and Application Software

Keep your system and Antivirus up-to-date with regular patches

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IDENTITY THEFT

PROTECT YOUR PERSONAL DATA

- Limit use of personal information in social networking sites
- Check all your online accounts and social networking accounts for any unauthorized use
- Use security features provided by all websites
- Password protect all documents you send
- Do online shopping only through sites that uses secure payment gateway
- Monitor your financial accounts for suspicious activity on a regular basis
- Beware of onlookers when using your credit/debit card and entering your PIN number
- Do business only with trusted companies/websites
- Always read and check privacy policies
- Take immediate action if you think your personal information has been misused

1930
NATIONAL CYBER CRIME HELPLINE NUMBER



THANKYOU

