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PREFACE

It is with great pleasure that we present to you Volume 7 of the GIBS Law Journal, a collection of insightful legal scholarship that reflects both the dynamic evolution of the law and the commitment of our contributors to addressing the pressing issues of our time. This volume features a rich array of articles, case analyses, and legal commentary that delve into contemporary legal debates, theoretical discussions, and practical applications. The contributions come from an esteemed group of legal academics, practitioners, and students, each bringing a unique perspective to the evolving landscape of the law.

As with each volume, this edition aims to foster intellectual growth and promote rigorous debate within the legal community. Our goal is not only to provide a platform for emerging voices in the field but also to engage with the legal challenges that shape our society. From emerging legal technologies and human rights to corporate governance and international law, this volume serves as a testament to the vibrancy and versatility of the legal discipline. We extend our heartfelt gratitude to all our contributors for their hard work, dedication, and thought leadership. Special thanks also to our editorial board, whose tireless efforts ensure the highest standards of scholarship and professionalism.

We hope that this volume of the GIBS Law Journal will inspire further inquiry, reflection, and discussion on the critical issues that continue to shape our legal and societal frameworks. As we look ahead, we remain committed to supporting the development of legal thought and practice for the benefit of all.

Sincerely,

Editor

I N D E X

ARTIFICIAL INTELLIGENCE AND ROBOTIC TRANSFORMATION IN THE SOCIETY AND WORKPLACE

Ausaf Ahmad Malik*
Abhilash Aggrawal**

Abstract

Artificial Intelligence (AI) and robotic transformation are effectuating profound shifts within society and the workplace, significantly redefining industry operations and the interaction between individuals and technology. Within the professional environment, AI-driven automation and Robotic Process Automation (RPA) are augmenting operational efficiency by assuming responsibility for repetitive and routine tasks, thereby enabling human employees to concentrate on more innovative and strategic endeavors. This transformation, while enhancing overall productivity, may also precipitate job displacement in certain sectors, particularly in positions characterized by routine manual or cognitive functions. Nonetheless, it concurrently generates new opportunities in emerging domains such as AI development, data science, and robotics engineering, necessitating a corresponding evolution in workforce competencies towards greater digital literacy and advanced technical expertise.In the broader societal context, AI and robotics are contributing to enhanced quality of life through advancements in healthcare, personalized services, and daily conveniences, including AI-assisted diagnostic tools and robotic surgical procedures. As AI and robotics continue to evolve, their integration into society and the workplace is expected to deepen, thereby necessitating the establishment of comprehensive regulatory frameworks and ethical guidelines to govern their impact. This research aims to discusss an increasingly collaborative dynamic between humans and machines, with significant ramifications for economic structures, global competition and social dynamics. Concluding to prove this ongoing transformation presents both opportunities and challenges, underscoring the imperative for a balanced approach that optimizes benefits while mitigating potential risks.

Keywords: Robotic Process Automation* (RPA), *Artificial Intelligence* (AI), Machine Learning (ML), *Technological Change, Automation

INTRODUCTION

Advent of technology (robotics) increase workplace safety because they replace workers from performing dangerous applications in hazardous settings, and workers are moved to supervisory roles instead. Some employees might get fired because the companies are using more robots to produce their products but some lucky employees left will enjoy the safe environment of the workplace since the robots are doing all the dangerous work. Robotics has taken a huge part in our industry, they are giving us a helping hand in many sectors and reducing our workload and at the same time have performance and efficiency. According to Bruemmer, robots are unable to recognise or notify any aspect that is not programmed into them by humans. In other words, robots are just machines that can't feel or recognise what's going on around them unless they've been programmed by people. According to *Mary Bellis*, "*Robotis a real or the imaginary machine that is controlled by the computer and is often made to look like a human or animal, and the machine that can do the work of a person and the works automatically or is controlled by the computer*." In the life of humans, robots are created to help the working classin their complicated and dangerous working environment an ability to revolutionise every aspect of to protect and enhance their working ability. It has the potential to assist us in overcoming some of our cognitive limits and solving complex challenges.[1]

The name 'robot' has a modern etymology, originating from the Czech word 'robota,' which denotes 'hard labor' or 'forced labour.' *Karl Apek*, a Czech writer born in 1890 and died in 1938, is attributed with originating the term, which he initially employed in his 1920 novel "R.U.R. Rossum's Universal Robots". Since 1495, when

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[1]J.V. Braun and S.A. Margaret, *Robotics, AI, and Humanity Science, Ethics, and Policy* 2 (Springer Nature Switzerland, 2021)

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Leonard Da Vinci created "The Mechanical Knight", the first human-like mechanical device, robots have developed into humanoids with AI capable of replicating human expressions. Designed by *John Brainerd* in 1865, the "Steam Man" was allegedly used for propelling wheeled carts and other objects. In 1885, *Frank Reade Jr.* invented the "Electric Man," which might be considered as an electronic evolution of the Steam Man.[2]

The "Three Laws of Robotics" are a set of fictional ethical guidelines devised by the science fiction writer *Isaac Asimov*. They are designed to govern the behavior of robots and ensure they act in a manner that is safe and beneficial to humans. The laws are:[3]

1. **First Law**: A robot may not injure a human being or, through inaction, allow a human being to come to harm.
2. **Second Law**: A robot must obey the orders given to it by human beings, except where such orders would conflict with the First Law.
3. **Third Law**: A robot must protect its own existence as long as such protection does not conflict with the First or Second Law.

These laws were introduced in Asimov's 1942 short story "Runaround" and have since become a fundamental concept in discussions of AI ethics and robotics, even though they remain a work of fiction.AI opens new doors for businesses and people. People are adaptable and create new jobs. Intelligent IT solutions reduce product and service completion time and cost. Humans can utilize saved time for riskier labor, relaxation, or other activities.[4] Thus, AI should boost prosperity. AI is complex and evolving quickly, according to PWC. Human life is easier thanks to AI. AI helps accomplish work faster and more precisely. Google believes AI decision-makers may be less biased than humans.[5]In this research paper we shall study the about the development of technology that may benefit and also may potentially harm humanity.

ORIGIN AND DEVELOPMENT OF AI AND ROBOT

The late 1950s and early 1960s saw growing robot popularity. Industrial robots helped plant workers throughout the automobile industry's rapid expansion. George Devol built UNIMATE, the first programmable robot, in 1954. *George Devol and Joseph Engelberger* founded "Unimation," an abbreviation for "universal automation," the first robot corporation, in 1956. Engelberger is called the 'Father of Robotics' for his achievements. Unimation still sells robots. Grey Walter used a tortoise in his 1953 cybernetics computational research. The 1960s saw the first attempts to replace surgically amputated human limbs, which advanced robotics. *Engelberger* visited Japan in 1966, when industrial robots were introduced. Engelberger addressed 700 robot-interested CEOs, emphasizing the need of industrial robots in Tokyo. Two hours of Q&A followed his speech. This incident showed Unimation that Japan was a competitive market for its Asia growth. The "Office for Promoting Domestic Production of Industrial Robot (IR)" opened in June 1968 in "Kawasaki Aircraft's Mechanical Division". The legally binding technological licensing deal with Unimation was signed in October.[6]

The development of automatons and robots was the focus of 1960's decade. However, it was also marked by a number of difficulties, such as the government cutting back on funding for AI research. In 1970, this was the year that Waseda University in Japan created the first humanoid robot, known as "WABOT-1" (WAsedaroBOT) Some of the qualities it included were movable limbs, the ability to see and converse, and others.[7]

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[2] A. Gasparetto, L. Scalera, "A Brief History of Industrial Robotics in the 20th Century" 8 *AIHS* 24 (2019).
[3] Chris Stokes, "Why the three laws of robotics do not work",2(2) *(IJREI)* 121-126 (2018).
[4]GerlindWisskirchen and BlandineThibaultBiacabe, *Artificial Intelligence and Robotics and Their Impact on the Workplace* 116 (IBA Global Employment Institute, 2017).
[5]YuwonoPrianto and VionyKresnaSumantri, "Pros and Cons of AI Robot as a Legal Subject" Vol. 439 *ASSEHR* 382 (2019).
[6]J.V. Braun and S. A.Margaret, *Robotics, AI, and Humanity Science, Ethics, and Policy* 2 (Springer Nature Switzerland, 2021).
[7]Neha M. Kolte, Gaurav S. Sonar, Shrivats P. Nigam and Tejal D. Zope, "Robotics: "A New Way of Lifestyle", 10(7) *IJIRSET* 10242 (2021).

A period during this decade is marked by AI Winter (a time when funding and interest in the field are at an all-time low), which was later revived when the British government resumed funding in an effort to counter Japanese efforts. 1980 saw the creation of WABOT-2 at Waseda University, which allowed the humanoid to communicate with others, understand music notation, and play an electronic organ. In 1984 at the "Association for the Advancement of Artificial Intelligence" (AAAI), cognitive scientist Marvin Minsky and AI theorist Roger Schank issue a dire warning about the AI winter, the first period of declining support for AI research. Within three years, their prophecy came to pass.

A number of developments that took place at the turn of the millennium gradually altered the field of AI. 1998 saw the creation of "Kismet," an expressive humanoid robot by MIT Professor Cynthia Breazeal. It's a robot with facial emotion recognition and simulation capabilities. With eyes, lips, eyelids, and eyebrows, the robot was designed to resemble a human face. Following the Y2K scare, AI continued to grow as the new millennium got underway. As predicted, more artificial bits of intelligence were produced, along with imaginative media (particularly film) that explored the idea of AI and its potential future.

Honda introduced "ASIMO", an AI-enabled humanoid robot, in 2000. This robot can carry plates to restaurant diners and move as fast as a human. Unsupervised autonomous text comprehension was initially called "machine reading" in 2006 by *Oren Etzioni*, *Michele Banko* and *Michael Cafarella*. Social humanoid robot "Sophia" was made by *Hanson Robotics*. In 2016, cutting-edge AI algorithms were added to make it more human-like. She can speak on specified themes and show over 60 facial expressions. Sophia became Saudi Arabia's first robot citizen in October 2017. Advanced capabilities let it track faces, keep eye contact, recognize individuals, analyze speech, and have natural language processing conversations.[8]

ROBOTIC PROCESS AUTOMATION

> "*The newest invention, known as Robotic Process Automation, will revolutionise outsourcing. The competition to become the leading provider of automation-enabled services in the sector is already starting to take shape. We are likely to eventually witness a race to develop the most innovative automation tools, which will result in new products and delivery paradigms*."
>
> -Sarah Burnett

A 'robot' is a machine with an electromechanical design that can be controlled by a computer and is capable of performing a complicated series of tasks autonomously. A robot works by entering the physical environment to complete tasks. These robots possess sophisticated links between perception and action. he conception, design, manufacturing, and operation of robots are all components of the field of robotics, which is a branch of engineering.It encompasses mechanical engineering, computer science, electrical engineering, and other fields. Robotics must place AI at the centre of the relationship for it to be intelligent.[9]

The word "Process," which is used in many sectors and in daily life. The action to finish a job is essential to any system or organization. Humans or products can finish the process. Whether a closed or open system, the process takes input from multiple instruments or personnel and follows preset criteria to produce the desired result. Only input-to-output conversion is ensured by the procedure.[10]Automating a device, operation, or system is called "automation." Automation in daily life benefits society already. Automation uses any system's CPU. It incorporates any system's processing power. Automation requires integrating people and systems, which is not an easy task. In system design, human factors particularly cognitive ones are frequently ignored or misinterpreted.[11]

RPA is a system that, in general, aims to automate business operations using user inputs and business logic. Applications for RPA give users the means to create robots (often known as 'bots') that may simulate their interactions with software by processing transactions, altering data, evoking reactions, and interacting with

[8]P. M.Nadkarni, Ohno-Machado and W. Chapman, "Natural language processing: An introduction," 18(5) *JAMIA* (2011).
[9]M. Brady, "Artificial intelligence and robotics. Artificial intelligence", 26(1) *AIJ* 82 (1985)
[10]SomayyaMadakam, Holmukhe Rajesh M. and JaiswalDurgesh Kumar, "The Future Digital Work Force: Robotic Process Automation (RPA)" 16 *JISTEM* 2 (2002)
[11] Sheridan, T. B., Humans and automation: System design and research issues 56 (Wiley-Inter-science).

other digital systems. A recent analysis by Trecent estimated that by 2025, automation technology like RPA may have a $6.7 trillion economic impact. The automation market, just after mobile Internet, will have the second-largest economic impact, according to the same estimate. RPA will increase productivity by automating repetitive, transactional operations, 77% of the 500 senior decision-makers who participated in a recent poll.[12] In some studies, the usage of RPA technology has been shown to reduce operating expenses of transactional tasks inside shared services by 30% to 50%.[13]

AI AND ROBOTIC AUTOMATION IN THE WORKPLACE

Robotic automation and AI are being used more and more in the workplace to automate monotonous jobs and boost productivity. Here are some examples of how robotic automation and AI are employed in different fields of business in the workplace.

Automation in the Manufacturing Sector

Robotic automation and AI are used to automate welding and painting tasks on assembly lines and monitor industrial operations. This lowers the risk of workplace accidents and increases productivity and quality control. AI and robotic automation are being employed more and more in manufacturing to increase productivity and quality assurance.In India, the use of AI in manufacturing is now expanding at a compound annual growth rate of 50 per cent.[14] Manufacturing companies are able to deliver generative products more quickly because of industrial AI robot collaboration. AI in the manufacturing sector is altering how manufacturers create things.

They are being rapidly incorporated into the automobile sector in order to open up new markets, improve workflows, and get closer to fully autonomous driving. AI is transforming the car business, just as *Henry Ford* did more than a century ago. Modern AI operations must extend to the cloud, integrate enormous amounts of data from many sources, and connect across the enterprise. A data pipeline that can smoothly acquire and transfer data from devices at the edge, core, and cloud is necessary to unleash the full potential of AI. By 2025, the worldwide automotive AI market will reach a peak volume of almost $27 billion, predicts Deloitte.[15]

The manufacturing AI solutions provide knowledge about the ideal design. Similarly to this, AI has numerous advantages for businesses in the manufacturing industry.

(i) **Tasks in the assembly line**: Routine operations like welding, painting, and material handling are being automated via robotic automation. Increasing product quality, decreasing production costs, and improving production efficiency can all be facilitated by this.

(ii) **Predictive maintenance**: AI is used in predictive maintenance to analyse real-time machine data in order to foresee and avoid machine faults. Predictive maintenance makes forecasts about asset failure using cutting-edge AI methods like machine learning and artificial neural networks.[16] This can lower maintenance expenses and downtime while also increasing the overall productivity of the production line.

(iii) **Quality assurance**: AI-powered quality control systems can automatically sort out defective goods and detect the product and raw material flaws. This can lower waste and raise the standard of the finished product.[17]

[12]DogucOzge, "Robot Process Automation (RPA) and It's Future" UmitHacioglu*et.al* (eds) *Handbook of Research on Strategic Fit and Design in Business Ecosystems* 470 (2019).
[13] Jorge Ribeiro, Rui Lima, Tiago Eckhardt and Sara Paiva, "Robotic Process Automation and Artificial Intelligence in Industry 4.0 – A Literature review"52 *PCS* 181 (2021)
[14]Ms.Gnaneswari P, "A Study on the Role of Artificial Intelligence in Manufacturing Sector" 8 *IJIRT* 702 (2021)
[15] A K Jha, "Artificial Intelligence (AI) in Manufacturing", 9 *IJIRMPS* 155 (2021)
[16]B. Buchmeister, I. Palcic& R. Ojstersek, "Artificial Intelligence In Manufacturing Companies and Broader: an Overview", 7 *DISB* 87 (2019).
[17]*Ibid*

AI AND ROBOTIC AUTOMATION IN THE HEALTHCARE SECTOR

AI and robots in healthcare are speedily developing concerns on a global scale. Both have the capacity to completely transform every facet of healthcare, ranging from formulation of pharmaceuticals to delivery of services. Healthcare robotics and AI enable the provision of high-quality patient care, efficient clinical processes, and a safe environment for both patients and medical personnel. Robotic systems are usually employed for administrative duties and mundane applications, therefore allowing medical experts and healthcare staff to allocate their time towards patient care.[18]These are surgical robots, exoskeletons, Prosthetics, Artificial organs device, pharmacy and hospital automation robots and social robots etc. were used in healthcare.

The healthcare industry is changing in many ways because to AI and robotic automation, which offers advantages like enhanced accuracy, efficiency, and patient outcomes. Here are some instances of how AI and robots are applied in healthcare:[19]

(i) **Medical Diagnosis**: AI-powered tools can aid medical professionals in making faster and more accurate diagnoses of diseases. Large amounts of medical data may be analysed by these instruments, which can also offer insights that are challenging for people to notice.

(ii) **Robotic Surgery**: The use of robotic surgery enhances surgical precision and accuracy. Robotic surgical equipment can carry out minimally invasive procedures, speeding up recuperation and lowering the possibility of problems.

(iii) **Medical Imaging**: Such as "X-rays, CT scans and MRIs" can be analysed using imaging systems driven by AI. By assisting in the early detection of abnormalities that human radiologists might miss, these technologies might improve patient outcomes and enable the earlier diagnosis of diseases.

(iv) **Personalized Medicine**: In order to develop individualised treatment strategies, AI-powered systems can examine a patient's genetic profile and medical background. As a result, treatments can be made more precise and efficient, lowering the possibility of negative side effects and enhancing patient results.

(v) **Telemedicine**: AI driven systems enable healthcare practitioners to remotely monitor and treat patients. By reducing the necessity for face-to-face appointments and enhancing healthcare accessibility for patients residing in distant or underprivileged regions, it is possible to achieve time and cost savings.

AI AND ROBOTS IN AGRICULTURE SECTOR

One of the most vital and significant sectors of the economy is agriculture. According to Worldbank.org, agricultural growth is among the most important factors in alleviating global poverty. Development in this industry will boost overall wealth and provide food for the next generations. In 2018, agriculture contributed approximately 4 to 5 percent to the global economy, while in nations like India, it can represent up to 18 percent of the national GDP.[20]

The UN's Food and Agriculture Organization(FAO) says that by 2050, there will be more than 9 billion people living in the world. The food delivery system is in trouble, but food demand is slowly going up, as about 68 percent of the world's people will live in cities. This means that farms need to be helped as little as possible.[21]Traditional farming practices put people's health and the environment at risk while failing to provide

[18]Ian Kerr and Jason Miller *et.al* (ed) *Robot and Artificial Intelligence in health Care* 259 (Canadian Health law and Policy, 2021).
[19] Karim Lekadir and Anna TselioudisGarmendia, *Artificial intelligence in healthcare: Applications, risks, and ethical and societal impacts* 1 (European Parliamentary Research Service, 2022).
[20] The world bank.org, "Agriculture Overview," Sep. 30, 2020.
https://www.worldbank.org/en/topic/agriculture/overview (accessed on 24.03.2023).
[21] The United Nation Department of Economic and Social Affairs "*68% of the world population projected to live in urban areas by 2050, says UN*" May 2018
https://www.un.org/development/desa/en/news/population/2018-revision-of-world-urbanization-prospects.html

the amount of food needed by the world's population in the future.[22]Some applications of robotic automation and AI in agriculture include:[23]

(i) **Accuracy in agriculture**: In order to deliver real-time insights on crop health, soil moisture, and nutrient levels, AI systems may analyse data from sensors, drones, and satellites. With the help of this knowledge, irrigation, fertilisation, and pest control can be made more effective, leading to increased yields and cheaper costs.

(ii) **Autonomous tractors and harvesters:** The development of autonomous tractors and harvesters that can carry out operations like planting, weeding, and harvesting with little to no assistance from humans is being facilitated by robotic automation. Especially for large farms, this can lower labour costs and increase efficiency.

(iii) **Plant breeding:**AI can be used to examine genetic data and find features that are beneficial for crop breeding, such as increased yield, disease resistance, and resilience to drought. This can assist plant breeders in creating crops that are more hardy and fruitful.

(iv) **Crop monitoring and controlling:** The monitoring of crops and the detection of problems like disease or insect infestation can be done by robots and drones with sensors and cameras. This data can be examined by AI algorithms, which can then offer suggestions for how to handle these problems.

AI AND ROBOTIC AUTOMATION IN WAREHOUSE

The basis for warehouse automation has been established by technologies like AI, robots, and other IT-supported innovations. They are divided into industrial robots and behavioural-based robots in the age of robotics. Warehouse management is a specific application for industrial robots.[24]

According to a study, "61% of IT and operations personnel in manufacturing, retail, transportation, and wholesale market segments planned to expand process automation between 2019 and 2024".[25] By enhancing effectiveness, productivity, and accuracy, robotic automation and AI can significantly improve warehouse operations. Here are some examples of how robotic automation and AI can be employed in a warehouse:

(i) **Autonomous Mobile Robots (AMRs):** AMRs can be used to move goods within a warehouse, lowering the need for labour-intensive manual labour and accelerating workflow. In order to navigate around obstacles and prevent collisions, they can also be fitted with sensors and cameras.

(ii) **Automated Storage and Reclamation Systems (ASRS)**: Robotics are used by ASRS to take products from high shelves and put them in the right places to be stored. Human operators won't have to climb ladders to physically gather objects as a result.

(iii) **Pick and Place Robots**: In order to increase productivity and decrease the need for human labour, these robots can be employed to pick up objects and deposit them onto conveyor belts.

(iv) **Inventory Management**: AI can be used to monitor inventory levels and forecast demand, enabling more effective use of warehouse space and lowering the likelihood of stockouts.

(v) **Quality Control**: Speedier detection and removal from inventory is made possible by the application of AI to identify damaged goods or packing.

[22]Talaviya T. and Shah D., *et.al* "Implementation of artificial intelligence in agriculture for optimisation of irrigation and application of pesticides and herbicides" 4 *AIA* 60 (2020).
[23]AkshayShet and PriyaShekar "Artificial Intelligence And Robotics in the Field of Agriculture" *Available at* https://www.researchgate.net/publication/347438971 2020 (Visited on March 29, 2023).
[24]Vikas Garg and Rashmi Agrawal (ed.), *Transforming Management Using Artificial Intelligence Techniques* 64 (CRC Press Taylor & Francis Group, 2021).
[25]Zebra Technology warehousing Vision Study 2024 p. 4 available at https://www.zebra.com/content/dam/zebra_new_ia/en-us/solutions-verticals/vertical-solutions/warehouse-management/vision-study/2024/warehouse-vision-study-en-us.pdf (visited on 02.04.2024)

AI AND ROBOTIC AUTOMATION IN THE EDUCATION SECTOR

One of the most important areas for the reformation of society is education. Every aspect of society is evolving as a result of AI, including the educational system. Robotics and AIadvancements have made it possible to integrate them into daily life and are increasingly being utilised in education to demonstrate the potential impact.[26]

Similarly, AI is currently improving the tools and equipment that are used on a daily basis in cities and on campuses all over the world. anything from smartphone functions and apps to public transportation and home equipment, including internet search engines. One common example of AI solutions that have permeated daily life is the intricate combination of algorithms and software that powers "Siri on iPhones".[27]

With a variety of advantages for both teachers and pupils, AI and robotic automation are making tremendous progress in the education industry. Here are some instances of how robotics and AI are transforming education:[28]

(i) **Personalized learning**: Personalized learning plans can be developed for students using AI-powered technologies based on their skills and preferred learning methods. This makes it easier to guarantee that students are receiving the education they require for success.

(ii) **Automated Grading**: AI can be used by educators to automate the grading process, which will save time and labour. As a result, teachers may concentrate on activities that are more crucial, such as lesson planning and giving each student individualised feedback.

(iii) **Intelligent Tutoring Systems**: The Systems which areused like AI-powered teaching can assist students who are having difficulty in a particular subject. These systems may adjust to each student's unique learning style and offer couturier feedback, which can help students to comprehend the subject matter in a better way.

(iv) **Virtual Assistants**: Students can get assistance from virtual assistants powered by AI with duties like research and writing. These assistants can offer clarification on issues, identify reliable information sources, and even help with writing.

(v) **Robotics**: In the field of education, robots can be applied in many different ways. For instance, they can help students learn how to code and programme, provide them with a hands-on learning experience, and even help with practical duties like cleaning and maintenance.

(vi) **AI and the Judicial Efficacy**

Robotics and AI are becoming more popular in many areas, including law. Some nations utilize them for administrative tasks, while others use them to aid judges make decisions. AI can assist judges but not replace them owing to disparities in knowledge structure, application scenario, and prospective capabilities. Thus, "judicial artificial intelligence" merely supports human judges, not replaces them.[29]AI has influenced judicial judgments. AI is changing court decision-making in the US and other countries, and legal analytics discoveries allow case prediction. In 2014, the UK-based Vital Company appointed the first robot to equal status on its board. Sophia, the most famous robot and the first to be awarded citizenship, existed in 2016.[30]The application of AI and robots in the legal system is illustrated by the following cases:[31]

[26]Hsiu-Ping Yueh and Feng-Kuang Chiang, "AI and Robotics in reshaping the dynamics of learning" 52 *BJET* 1804 (2020).
[27] Stefan A. D. Popenici and Sharon Kerr, "Exploring the impact of artificial intelligence on teaching and learning in higher education" 12:22 *RPTEL* 5 (2017)
[28]SayedFayaz Ahmad and Mohd. KhairilRahmat*et. al.,* "Artificial Intelligence and Its Role in Education" 13 *Sustanability*1 (2021).
[29] Chen Mingtsung and Li Shuling, "Research on the application of artificial intelligence technology in the field of Justice", 1570 *ICAACE* 6 (2020).
[30] Tania Sourdin, "Judge v Robot: Artificial Intelligence and Judicial Decision-Making", 41(4) *UNSWLJ* 1116 (2018).
[31]OguzGokhan, "Using AI in Judicial Practice – Can AI Sit on the Bench in the Near Future", 10 *LJR* 70 (2019).

(i) **Case Forecast:** On the basis of data from prior instances, AI is being utilised to forecast the results of court proceedings. By doing so, you can shorten the backlog of cases and assist judges in making better judgements.

(ii) **Legal Research:** Large amounts of legal data, including legislation and case law, are being analysed by AI-powered legal research tools, which then present pertinent information to attorneys and judges.

(iii) **Sentencing Recommendations:** In certain nations, AI is being utilised to offer courts suggestions for punishments based on elements including the seriousness of the offence and the offender's prior criminal record.

(iv) **Robots Courtroom:** In some courts, robots are employed to carry out clerical duties including overseeing visitors and delivering paperwork. These robots could allow up court staff members to work on more difficult responsibilities.

(v) **Online Dispute Resolution:**Online activities have contributed to the growth of online disputes, such as the use of e-commerce websites like amazon.com and e.com. AI powered online conflict platforms are being utilised to settle minor disagreements without the need for court appearances. In addition to offering a quicker and more convenient option for people to settle conflicts, this can lessen the load on the legal system.As a result, it is reasonable to anticipate that online ADR will become a resource of increasing value as it makes use of the network's increasingly sophisticated tools.[32]

CONCLUSION

AI has simplified our lives and incorporated effortlessly into daily life. Technology is used for employment, leisure, and education. Saudi Arabia, China, and Japan embrace AI robots as part of their culture, and some are even given citizenship. A man in China is marrying an AI robot, changing how individuals are defined and relate to one other. A robot judges a case, changing justice. AI robots have transformed worldwide workplaces and society. AI is revolutionizing the industry. Traditional business methods are changing. Horror and fascination surround “machines, with human-level competence”. The rise of human-level machines must be examined. Thus, without laws, their breadth and involvement will be investigated soon.

In general, workplace autonomy and AI robots have influenced the issue. However, certain worries remain about autonomy's safety in some scenarios. The new digital world revolves around ICT. AI, like side effects, can create fear. Limited autonomy has been discussed, like in the military. This technology threatens privacy in market and communication systems. As ICT integration advances, AI adoption will project high-level agricultural and military capabilities. How AI is used will influence society. Thus every field we studied has been transformed by AI. AI robots have changed practically every area of modern life worldwide.

[32] Ethan Katsh and Janet Rtfkih, “E-Commerce, E-Disputes, and E-Dispute Resolution: In the Shadow of ‘eBay Law’”, 15 *OHIOSJDR* 733-34 (2000).

DEFENDING DIGITAL ECONOMIES: USE OF ARTIFICIAL INTELLIGENCE IN FINANCIAL CYBER THREATS AND CRIMES

Priyanki Jawalkar*

Abstract

Digital economy is trending very fast in the modern technology. It aids in job creation, creating scope for innovations by entrepreneurs, initiating rapid growth in business ventures. Despite the advantages of digital economy, it has also lead to a number of challenges such as cyber threats, data breaches, regulatory issues and other threats. Artificial Intelligence (AI) plays a binary role in crimes both in combating and facilitating crimes. Financial cybercrimes are carried out by means of digital methods. AI is revolutionizing the fight against cybercrimes by protection of sensitive material, fraud detection, behavioural threat detection, detection of unsolicited e-mails or messages etc. At the same time, they are emerging threats like phishing, Deepfake Audio Technology and Video technology, data corruption and manipulation of outputs Malware/Code Generation etc.

AI on one hand is a boon as it is an immense contributor to the growth of the economy and development of the countries while on the other hand, it is potentially misused particularly in committing cybercrimes where current laws are inadequate. Thus, urgent AI policies are needed to empower the criminal justice system to tackle cyber threats. To ensure accountability of AI use and for a reasonable approach to AI regulation in combating and preventing cyber threats the government officials should be educated to act swiftly.

Keywords: AI, Cybercrimes, Cyber threats, Cyber Attacks, Cyber Security, IT Act.

INTRODUCTION

This is an 'Era of Digitalization'**.** Information and communication technology has driven digital economy to be an immense contributor to the global economy. The nature of technology is rapidly changing, which in turn, is impacting various sectors of economy such as agriculture, government, education, health etc.

Digital economy is trending very fast in the modern technology. It refers to economic activities, financial transactions, etc that are conducted via digital platforms. It is one of the important instruments for the growth and development of countries. The benefits of this are tangible worldwide. It is accessible, facilitates fast transactions and is convenient in all sectors especially business. It can be operated globally round the clock. It provides access to products and services, thus enhancing customer satisfaction. It aids in job creation, creating scope for innovations by entrepreneurs, initiating rapid growth in business ventures. At the same time it reduces the cost and complexity for entrepreneurs and startups. Digital economy has gained momentum in developing countries.

Despite the advantages of digital economy, it has also lead to a number of challenges such as cyber threats, data breaches, privacy concerns, regulatory issues and other threats. But disruption in digital services will lead to significant losses for small and large scale enterprises, government etc finally affecting the growth in economy.

Artificial Intelligence (AI) plays a binary role in crimes both in combating and facilitating crimes. This is posing many challenges. On one hand, the tools of AI identify the activities of fraudsters and mysterious criminals, and on the other hand it allows and helps malicious persons to use AI in creating more realistic, misleading statements, accounts, records, etc that facilitate financial cyber crimes and frauds.

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FINANCIAL CYBER CRIMES

These offenses are carried out by means of digital methods. Financial cyber crimes are illegal activities conducted by way of digital platforms and technologies to steal, defraud, or manipulate financial information and assets. These crimes are on the rise though security measures are also being created simultaneously. Digital economy is to be defended against these financial crimes which are becoming very complex and is a threat to the world. The techniques employed by cyber criminals are also becoming more complex and intense. Digital economy relies on secure financial transactions conducted online for example e-commerce platforms, online banking, digital payments systems etc. Cyber criminals target individuals, financial institutions, business organizations and consumers who have a constant fear of cyber attackers as they exploit them for financial gains and commit financial frauds. This is a global threat to all including the government.

In India, The Information Technology (IT) Act, 2000 has addressed various financial crimes. This Act provides a legal framework to prosecute offenders and protect individuals and organizations from various cyber threats and financial frauds that are facilitated by the use of technology. The important financial crimes under the IT Act are:

1. **Hacking** (Section 66) – Where the hackers gain unauthorized access to someone else's computer system without permission, which can lead to financial losses or unauthorized transactions.

2. **Identity Theft** (Section 66C) – Where a person fraudulently or dishonestly makes use of the electronic signature, password, or any other unique identification feature of another person which leads to financial fraud and loss.

3. **Phishing** (Section 66D) - This involves fraudulently obtaining sensitive information, such as passwords and credit card details, by masquerading as a trustworthy entity in electronic communication.

4. **Cyber Fraud** (Section 66B) – Where a person dishonestly or fraudulently makes use of the electronic signature, password, or any other unique identification feature of another person with the intent to cause wrongful loss or gain.

5. **Data Theft** (Section43) **-** Where the hackers in an unauthorized way accesses, downloads, extracts or copies the data from a computer system or network. This includes stealing financial data or intellectual property, leading to financial loss.

6. **Denial of Service Attacks** (Section43) – This section deals with unauthorized access to a computer system or network causing damage or disruption. Denial of Service (DoS) attacks can disrupt financial services or transactions, causing financial losses.

7. **Violation of Privacy** (Section 72A) – It prohibits disclosure of information intentionally or knowingly without consent where such disclosure is likely to cause wrongful loss or gain. This can include financial information or personal data.

8. **Forgery of documents or electronic records** (Section 463) - Under Section 463 of the Indian Penal Code (IPC) read with the IT Act, forging electronic records, digital signatures, or electronic documents with the intent to commit fraud or harm is considered a financial crime. This Section 463 has been repealed by the new act namely Bharatiya Nyaya Sanhita, 2023(Section 336 to Section 344) where it explains about the different kinds of forgeries.

These financial cyber attacks affect the individual victims leading to financial loss, compromise their identity and damage their reputation. The financial institutions face threats to their economic stability. This impacts the economic growth, disrupts social structure and trust in financial systems. This growing threat of financial cyber

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crimes poses a serious economic challenge to both individual citizens and to the national economy. Thus proactive measures are being developed by policy makers, law enforcement agencies, and financial institutions to protect the society from the risk of cyber crimes.

ARTIFICIAL INTELLIGENCE (AI)

It is a technology that facilitates computers and machines to replicate human intelligence and problem-solving skills.It combines with other technologies and performs tasks that would otherwise require human intelligence or intervention. Examples of AI are digital assistants, GPS guidance, autonomous vehicles, generative AI tools etc.

In the field of computer science AI includes machine learning and deep learning. These fields involve creating AI algorithms that mimic the human brain's decision-making processes, allowing them to 'learn' from data and make accurate predictions.[2]

AI is revolutionizing the fight against cyber crimes. The damage from cyber attack is devastating. Artificial Intelligence uses machine learning methods, advanced algorithms and intelligent software products to actively monitor network environments, internet and mobile network. AI is also known as intelligence amplification in which human skills particularly the reflective and conceptual learning capacities are combined with precision and speed.[3]

MANAGEMENT OF CYBER THREATS BY AI

1. **Prevention:** AI based solutions are being evolved constantly to monitor the computer systems environment with human intervention by tracking the device parameters, user activities and event logs to detect threats even before they occur. This enables the electronic brain to apply adequate measures and thus prevent the damage being caused by cyber attackers. [4]

2. **Behavioral Threat Detection:** They analyze and unearth ways to attack suspicious user behavior patterns. An AI system quickly identifies and detects deviations that may be unpleasant threats such as account takeovers, cyber cloning etc and block suspicious information. Thus enabling to resolve more issues in less time. This implementation of AI technology in behavioral analysis enables the personals to rely on statistical analysis rather than the experience or security protocols of the experts.

3. **Swift Hacking Prevention:** AI neutralizes hacking attempts and disallows connections and sessions carried out by dubious users very quickly. This way of handling is very helpful in social networks, copyright protection and connections of a large number of users like online gaming and entertainment.

4. **Protection of sensitive material:** AI facilitates the scanning and management of vast amounts of sensitive data and records of the company by means of automated solutions that identify and evaluate important, essential and sensitive data sources. The potential to accomplish by computers by use of AI helps companies to track, identify and locate data breaches and vulnerabilities before they can be exploited by hackers.

5. **Fraud detection:** AI detects and prevents deceitful activities by scrutinizing large data bases from different origins that are fraudulent. It discovers and ascertains from new data and customizes to evolve new strategies helping organizations in improving their ability to ‘spot’ and ‘stop’ fraud in real-time. This proactive approach augments security before hackers can exploit them from illegal activities that lead to financial losses.

[2] *https://www.ibm.com/topics/artificial-intelligence, visited on 7/10/2024*
[3] *https://forbytes.com/blog/ai-in-cybersecurity/, visited on 7/10/2024*
[4] *ibid*

6. **Financial manipulation in banking:** This refers to the actions that are deliberately and deceptively taken by individuals or other elements like organizations or establishments within the banking sector to illegally modify financial records, transactions, or reports for personal benefit or to deceive stakeholders. The manipulation involves several unethical or illegal activities like fabricating financial statements, distorting financial performance, manipulating interest rates, insider trading, or engaging in deceitful transactions. All this destabilize the financial markets, banking institutions and impair the investors and customers from investing. To be cautious, banking sectors are using AI to link all information, to identify any attempt carried out by cyber criminals. This helps in enforcement of law and order thus saving loses.

7. **AI dealing in trade:** The AI uses a machine learning system to analyze market data in real time, providing users with accurate predictions. It collects data from various markets, analyzes the data, provides and helps the traders with valuable information for investment option to prevent losses. The most prominent AI learning applications are "algorithmic trading, risk management, fraud detection, credit scoring, and customer service."

8. **AI Adoption by small and medium-sized enterprises (SMEs):** Presently affordability of AI technology has motivated more companies including small and medium-sized enterprises SMEs to develop AI solutions for their benefit. This extensive acceptance of AI helps the business men to improve efficiency, reduce costs and gain competitive returns. Additionally, AI enables SMEs to analyze and integrate large volumes of data for informed decision making, promote customer satisfaction by way of personalized services and focus on more strategic initiatives. AI technology is propelling transformation and growth across various industries.

THE DARK SIDE OF AI: EMERGING THREATS AND CYBERCRIMINAL INNOVATIONS

Many AI tools like CAPTCHA-breaking, cracking passwords, audio and speech cloning are being used in financial cyber threats and crimes. These are just some of the many malicious innovations used to commit cybercrimes. Though AI improves the standard of life of the people at the same time cyber criminals are misusing it. They are categorized as follows:

- AI Deep fake Audio Technology and Video technology in spreading disinformation
- AI Supported Password Guessing
- AI used for Human Impersonation
- AI conversion of natural language into code to launch cyber attacks
- AI helps ransomware attackers predict vulnerabilities
- AI encourages phishing
- AI in Malware/Code Generation
- AI tools as an edge over cybersecurity
- Evasion: provides deliberate inputs to corrupt their outputs by means of AI
- Extract of confidential data: Model inversion or querying is done by use of AI
- Data corruption and manipulation of outputs via AI.
- Botnet threat by phishing attacks or malware attacks

THE IMPACT OF AI IN COMBATING CYBERCRIMES AND CYBER ATTACKS

1. **Electronic Authentication Method:** This gives extra security to the customers accounts. Instead of just one password a second form of verification like a code is sent to the phone of the customer/client to access his/her account. This procedure makes the hackers harder to steal the password of the customer/client.

2. **Detection of unsolicited e-mails or messages:** AI helps detect spam emails by detecting unusual patterns or suspicious links that indicate phishingor other malicious activity keeping the inbox safe.

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3. **Managing dangerous websites:** Domain Name System (DNS) security uses AI to block dangerous websites and content. It analyzes web addresses and prevents cyber attacks by prohibiting from visiting harmful sites or accessing malicious content online.

4. **Botnet Detection:**Botnet attacks have become more frequent and harmful. Botnet is detected by AI which detects the domain name of the Core Command Centre server in the botnet. [5]

5. **Neural network systems:** AI powered Neural Network Systems help to detect and prevent Distributed Denial of Service (DoS) attacks. Theyattack,crush networks by means of fake trafficandmakes websites unreachable. Thus AI helps networks to identify and stop before they cause damage.

6. **Automated Threat:** In this the AI usescloud-based analytics to continuously monitor new methods of attack. By way of analyzing patterns and behaviors they can quickly identify and counter to the new cyber threats andkeep the systems secure.

   Finally AI enhances to predict threats, detect crimesby responding quickly to protect sensitive data and systems. [6]

CASES OF FINANCIAL CYBER-CRIMES / THREATS

Case reported by Indian Express: A 76-year-old man named Arvind Sharma from Govindpuram, Ghaziabad, fell victim to an extortion scam orchestrated by criminals using sophisticated methods of deception. Arvind Sharma recently acquired his first smartphone and set up a Facebook account. On November 4, 2023, fraudsters initiated contact with him through a Facebook video call. During this call, Sharma was exposed to a naked photo, which startled him this lead him to quickly terminate the call. Following the Facebook video call incident, the criminals continued their scheme by contacting Sharma via WhatsApp. This time, they posed as a person in a police uniform and threatened Sharma. They claimed to have incriminating material like - the recorded video or a fabricated story about Sharma that could bring him legal trouble or embarrassment. To intimidate Sharma further, the criminals threatened to file a complaint against his father unless he complied with their demands for money. Fearing the consequences of the false allegations and the potential embarrassment to his family, Sharma succumbed to the pressure. Over a period of time, Sharma ended up paying a substantial amount of moneystarting with Rs 5,000 initially and escalating to Rs 74,000. The extortion continued to the point where Sharma felt compelled to borrow money from his workplace, where he serves as a clerk.

The psychological impact on Sharma was severe, driven by fear of legal repercussions and the social stigma associated with the fabricated video or story. Financially, he suffered significant losses due to the repeated payments forced upon him by the criminals.

This case highlights the dangers of online extortion and the vulnerability of individuals, especially elderly ones who may be less familiar with digital platforms and the tactics used by cybercriminals. It underscores the importance of cybersecurity awareness, caution in online interactions, and seeking help from law enforcement or trusted individuals when faced with suspicious or threatening situations online.[7]

In November, a59 year old woman was duped for putting Rs 1.4 crores to a hoax caller who “mimicked" the woman's nephew. The nephew lives in Canada reiterated that he was in badly in need of immediate cash. This was reported in Deccan Herald, December 2023. [8]

[5] *https://scholar.google.com/scholar_lookup?title=Botnet%20Detection%20Method%20Based%20on%20Artificial%20Intelligence&publication_year=2019&author=J%20Peng&author=Y%20Fu&author=Y%20Cheng&author=C%20Chen&author=Z%20Guo, last visited on 7.06.2024*

[6] *https://woxsen.edu.in/woxsen-law-review/wlr-papers/camouflage-of-AI-in-cyber-crimes-vis-a-vis-legal-issues-and-challenges/, last visited on 7.06.2024*

[7] *https://indianexpress.com/article/cities/delhi/new-to-smartphone-ghaziabad-elderly-man-loses-rs-74000-to-cyber-fraudsters-9048514/, last visited on 7.06.2024*

[8] *https://www.deccanherald.com/technology/navigating-the-uncharted-ai-tide-sweeps-india-2794446, last visited on 7.06.2024*

In another case of cyber fraud in July 2024, a retired central government employee P S Radhakrishnan of 68years, from Kozhikode, lost Rs 40,000 by way of deep fake fraud. He received a video call from someone who "looked like" a former colleague asking money for the surgery of his relative.[9]

For dealing with such cases- a comprehensive strategy is to be followed, also increase public awareness about AI application and technology, and its exploitation is required. The knowledge of AI technology in cyber crimes has helped the police in handling the case-DGP, M.A Saleem, Criminal Investigation Department (CID), Economic Offences and Special Units, Karnataka. The methods used in online financial frauds are increasing at a very rapid pace. Criminals are using AI applications. He stated there will be more crimes involving identity tampering using images and videos, like the ones used indeepfakes.

It is observed that criminals are early adopters of technology and so there is a great need of effective counter-strategies. Presently it is very important to recognize and accept AI as a tool that will be applied in various aspects of cyber threats and cyber crimes. [10]

DCP cyber Siddhant Jain said that the police had arrested 28 peopleand 9 women inthe last two months for duping people. The people had offered investment opportunities in share markets. In just 2 months (May and June 2024), in separate incidents of cyber fraud, the police reiterated that a large sum of money amounting to Rs. 38.25 crores was swindled in India. On investigation the police recovered Rs 27,700 in cash, three laptops, 24 chequebooks, an iPOS machine, 15 mobile phones and 95 SIM cards from their possession. [11]

In another case reported in Indian Express, a Gurgaon-based doctor who fell victim to an online fraud. The doctor worked in the surgical oncology department at a hospital in Gurgaon. He was approached by a woman on social media who claimed to offer financial advice, particularly on foreign currency investments. The conversation quickly moved to Telegram, where the fraudster gained the doctor's trust by showing a significant profit on a small initial investment of Rs 40,000. On being promised high returns, the doctor continued to invest more money. By May, his investments had increased to an amount of Rs 23 lakhs. The fraudster convinced him to pay taxes on these supposed profits, stating that it was necessary to withdraw the gains.

As instructed the doctor continued to invest and pay taxes. His total losses escalated to Rs 50 lakh. This included not only the investments made but also the taxes paid periodically on the promised profits. The fraudster kept luring the doctor with promises of more returns, leading to repeated financial commitments from the victim. After gaining a significant sum from the doctor, the fraudster abruptly cut off communication by blocking the doctor's contact on both mobile phone and WhatsApp. This left the doctor unable to reach the fraudster or recover any of his invested money. The doctor subsequently filed a police complaint under section 420 (cheating) of the Indian Penal Code (IPC). This section deals with cases where deceitful practices are used to dishonestly induce someone to deliver any property or valuable security.[12]

In another case - a businesswoman from Pune fell victim to a sophisticated cyber fraud by individuals posing as officials from the German embassy and representatives of a German cosmetics company. In April 2024, the businesswoman received a call from an international number where a woman claimed to be a buyer from a German cosmetics firm. The caller provided a contact number in India, supposedly to be of a company producing a specific oil required by the cosmetics industry. The caller convinced the businesswoman to purchase five litres of this oil, priced at Rs 1.5 lakh per litre, amounting to Rs 7.5 lakh. The payment was made to a bank account provided by the fraudsters, and subsequently, a container of the oil was delivered to the businesswoman. Soon after receiving the initial shipment, the businesswoman was contacted by a man posing as an officer from the German embassy. This person persuaded her to order an additional 15 litres of the oil under

[9] *Ibid*
[10] *https://www.deccanherald.com/technology/navigating-the-uncharted-ai-tide-sweeps-india-2794446, last visited on 7.06.2024*
[11] *https://www.business-standard.com/india-news/rs-38-25-cr-swindled-in-cyber-fraud-across-india-in-two-months-police-124070801185_1.html, last visited on 7.06.2024*
[12] *https://indianexpress.com/article/cities/delhi/doctor-loses-rs-50-lakh-in-foreign-currency-investment-fraud-9439140/, last visited on 7.06.2024*

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the pretext that it would be easier to send a larger quantity to Germany. Trusting the authenticity of the request, she placed the order and paid Rs 22.5 lakh to the same Indian contact number provided earlier. After the second payment, all communication channels with the supposed German buyer, embassy official, and Indian oil supplier abruptly ceased. This raised suspicion, and the businesswoman realized she had been defrauded of a total of Rs 30 lakhs.

Subsequently, the businesswoman filed a First Information Report (FIR) at the Hinjewadi police station with the sequence of events by providing details of the fraudulent transactions. The case is now under investigation by the authorities to trace the perpetrators and gather evidence related to the fraudulent bank transactions, false representations, and the disappearance of the fraudsters after obtaining the money.

This case highlights the dangers of sophisticated cyber frauds where fraudsters impersonate legitimate entities, such as embassy officials and international businesses, to deceive individuals into making significant financial transactions. It underscores the importance of verifying identities, conducting due diligence, and exercising caution in international business dealings, especially when initiated through anonymous contacts or unknown channels.[13]

According to a report in The Hindu Editorial on July 12, 2024, the Hyderabad Cyber Crime Police stated that when an online complaint is lodged on the National Cyber Crime Portal (NCRP) or in the nearest cyber crime police station or by dialing the National Helpline number 1930 about the cybercrime/offence within an hour of commission of offence it is called as the "**Golden – Hour Complaint**" and the victims can recover 90% to 100% of the amount lost.

In two cases, one on July 11, 2024 evening, a transaction amounting to Rs. 4.79 lakhs and another transaction amounting to 3.79 lakhs was blocked within thirty (30) minutes of reporting.

Later in the night, another case was filed involving a male private employee who reported a loss of ₹97,312. A notice was sent to Merchant Locon Solution, the parent company of Housing.com by the cyber police. Subsequently, the company initiated a refund process, which is expected to be credited back to the source account within 7 to 10 working days, without the need for a court order.

In yet another breakthrough case of a medical professional who was defrauded for an amount of Rs. 17.45 lakhs, within 22 minutes of the complaint filed on the NCRP portal the bank officials blocked multiple transactions.[14]

This shows how AI can also be used as an important tool to curb financial cyber frauds.

MONITORING RISK AND GOVERNANCE OF AI IN USA

US financial institutions are navigating the integration of AI by focusing on robust risk management frameworks, adherence to regulatory requirements, and ensuring the safe and fair deployment of AI technologies. This approach not only enhances operational efficiency and effectiveness but also strengthens consumer and investor confidence in AI-driven financial services.

Appropriate governance and controls over the use of AI and other tools are essential for managing risks effectively. The principles that are relevant for managing the risks associated with AI are as follows:

1. **Assessing Conceptual Soundness**: This is to ensure that the AI model is robust and appropriate for the purpose intended. To identify any flaws or assumptions that could weaken the model's reliability.

[13]*https://indianexpress.com/article/cities/pune/woman-duped-of-rs-30-lakh-by-fraudsters-posing-as-german-embassy-officials-9438910/*

14https://www.thehindu.com/news/cities/Hyderabad/golden-hour-complaint-helps-cybercrime-victims-save-2221-lakh-in-hyderabad/article68396309.ece

2. **Confirming Underlying Data**: Ensure the quality and relevance of the data used to train and operate the AI model. The data is to be accurate, complete, and representative of the conditions the model will encounter while performing.

3. **Considering Model Complexity and Transparency**: The AI model should be appropriate for the problem it addresses. More complex models offer higher performance but will be harder to understand and manage. Transparency involves making the model's workings understandable to stakeholders, which helps in trust-building and effective governance.

4. **Assessing Performance**: Regularly evaluating the AI model's performance helps to ensure and meet the objectives as intended. This includes both back-testing against historical data and forward-testing in live environments.

5. **Evaluating Implementation**: This involves checking how well the AI model is integrated into existing systems and processes. It ensures that the model's outputs are used correctly and that any operational issues are promptly addressed.

Ongoing performance monitoring is crucial for the following reasons:

1. **Continuous Assessment**: Regular monitoring helps ensure that the AI model consistently performs as expected. By continuously evaluating the model's outputs, stakeholders can confirm that the model remains accurate and reliable over time.

2. **Adaptation to New Data**: The environment in which AI models operate is dynamic, with new data and changing conditions. Ongoing monitoring allows the model to adapt to these changes, ensuring it stays relevant and effective.

3. **Early Identification of Issues**: Monitoring helps in detecting any deviations or anomalies in the model's performance early. This early detection is essential for preventing potential problems from escalating and causing significant negative impacts.

4. **Timely Corrective Actions**: When issues are identified promptly, corrective measures can be implemented swiftly. This proactive approach minimizes risks and maintains the model's reliability and accuracy.

For Financial Market Utilities (FMUs), which play a critical role in the financial system, these considerations are particularly important:

1. **Sound Models**: FMUs use models to manage risks, such as determining the financial resources needed to cover potential losses and setting margin requirements. Ensuring these models are theoretically sound is crucial for maintaining financial stability.

2. **Reliable Data**: The accuracy and reliability of the data feeding into these models are vital. FMUs need to ensure that the data is correct and up-to-date to produce reliable risk assessments.

3. **Manageable Complexity**: While complex models can offer better performance, they can also be more difficult to manage. FMUs must balance complexity with transparency and ease of use to ensure that stakeholders can understand and trust the models.

4. **Consistent Performance**: Regularly evaluating the model's performance ensures it continues to meet its objectives and provides accurate risk assessments.

5. **Seamless Implementation**: Effective integration of the model into the FMU's processes is essential. This ensures that the model's outputs are used correctly and any operational issues are addressed promptly.

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6. **Financial Stability and Risk Mitigation**: By continuously monitoring and adjusting their models, FMUs can maintain financial stability and effectively mitigate risks. This ongoing evaluation ensures that the models remain accurate and reliable as market conditions evolve.

In summary, ongoing performance monitoring is a critical practice for both AI models and the models used by financial market utilities. It ensures that these models continue to perform as intended, adapt to new data and conditions, and provide accurate and reliable risk assessments.[15]

UK- STRATEGIC APPROACH: APPLICATION OF AI IN CYBERSECURITY

In November 2023, leaders from around the world met at the Bletchley AI Safety Summit to discuss the use of AI in economy, in science and benefits to the society. They also discussed the risks of using AI in technology.

The Summit Declaration emphasized that AI should be safe, focused on people, trustworthy, and used responsibly for everyone's benefit. The National Cyber Security Centre (NCSC) is working with global partners and the industry to offer advice on developing and using AI securely. In November 2023, they published the "Guidelines for Secure AI System Development" to help make sure AI benefits society while staying secure and trustworthy.

The NCSC Assessment (NCSC-A) is the UK's top authority on cyber threats. They combine information from classified intelligence, industry, academia, and open sources to make key judgments that help make policies and improve cyber security in the UK. They collaborate with government, industry, and international partners to gather expert insights for their assessments.

NCSC-A is part of the Professional Heads of Intelligence Assessment (PHIA), which focuses on developing the intelligence profession by maintaining high standards, analytical techniques, and fostering a community across the government. This report informs about how AI might impact cyber threats in the near future.[16]

CONCLUSION

The advancement of AI presents both significant benefits and considerable risks. While AI technologies have several advantages like enhanced effectiveness and innovative solutions in various domains it also brings in new challenges particularly in cybersecurity. Cyber criminals constantly evolve new methods, exploiting vulnerabilities in AI systems to commit cybercrimes.

Augmented Intelligence enhances cybersecurity by human expertise with advanced AI tools to detect and predict threats effectively. The rise of Autonomous Intelligence introduces challenges like adaptive malware, rapid attack execution, and sophisticated social engineering like deep fakes. These AI-driven threats operate independently, making them harder to combat. Addressing these challenges requires continuous innovation in AI defenses, stringent regulations, international collaboration to lessen global cyber threats effectively and stay ahead of evolving cyber threats.

AI on one hand is a boon as it is an immense contributor to the growth of the economy and development of the countries while on the other hand, it is potentially misused particularly in committing cybercrimes where current laws are inadequate.

The important legal needs like defining AI within a legal context, ensuring preservation of individual rights, encouraging technological progress and ethical standards are important in guiding regulatory efforts that advocate innovation and accountability. An effective, legislative guidelines and regulation is required to anticipate and address the ethical and societal impacts of AI advancements. Law enforcement agencies lack

[15] *https://home.treasury.gov/system/files/136/Managing-Artificial-Intelligence-Specific-Cybersecurity, last visited on 27/04/2024*

[16] *https://www.ncsc.gov.uk/report/impact-of-ai-on-cyber-threat*

technical expertise and the cybercriminals exploit advanced computer skills. Thus urgent AI policies are needed to empower the criminal justice system to tackle cyber threats. To ensure accountability of AI use and for a reasonable approach to AI regulation in combating and preventing cyber threats the government officials should be educated to act swiftly. In this regard one of the recent developments of the "Golden – Hour Complaint" in Hyderabad, can be understood as to how AI can play a crucial role in curbing financial cyber frauds.

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CITIZEN'S SUIT AND ACCESS TO INFORMATION UNDER ENVIRONMENTAL MATTERS

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Abstract

Informational governance refers to a societal transformation caused by information generation, processing, transmission and use in the domain of environmental governance. If information has a transformative capacity for the society as whole, then transformation will also affect the role of citizens. Hence this paper discusses the provisions and limitations of citizen suits under environmental laws in India, particularly focusing on the Environmental Protection Act (EP Act) of 1986. This paper highlights that prior notice requirements and limited access to evidence hinder the effectiveness of citizen enforcement. Moreover, points out the challenges faced by private prosecutors, such as the inability to compel disclosure of responsible officers and the reliance on regulatory bodies for sample collection and documentation. Furthermore, it mentions the absolute discretion of the Pollution Control Board in providing relevant reports and the potential denial of access based on public interest. Last by not the least concludes by emphasizing the need for fairness and transparency in environmental administration.

Keywords: Common Law, Citizen Suit, Environmental Laws, Environmental Protection Act (EP Act) 1986, Prosecution, Polluter, Pollution Control Board..

INTRODUCTION

A legal action brought forth by an individual who is not affiliated with the government, commonly known as a citizen suit, is a legal proceeding that is instituted to uphold a law that pertains to the environment.[1]Given that regulatory bodies tasked with enforcing environmental legislation may not be able to apprehend and bring to justice all individuals or entities that breach said laws, it follows that the power to lodge a formal grievance against any such wrongdoer who violates the established environmental Acts and standards is bestowed upon any individual. Prior to the enactment of the EP Act 1986, the act of prosecuting individuals or entities for violations of Indian environmental laws was solely within the purview of the government. Organisations or individuals who advocate for the well-being of the general public did not possess any legal recourse against an entity that released waste products in excess of the officially sanctioned thresholds, apart from the ones that are established through customary legal practises. However, at present, in accordance with the provisions stipulated in Section 19 of the EP Act of 1986, an individual who is a member of the general public is now empowered to utilise the legal system to bring a case against any entity that is responsible for polluting the environment or any corporation that is engaged in activities that are detrimental to the environment, on the condition that a notice of intent to prosecute is issued to the accused party at least sixty days prior to the commencement of legal proceedings. Derived from this particular stipulation, the Air Act of 1981 and the Water Act of 1974 underwent modifications in the year 1987 and 1988, respectively, in order to conform to the EP Act of 1986. This aforementioned act opened up novel avenues for the enforcement of environmental regulations in India, which were distinct from the ones established by the Common Law. As a result, citizens were empowered to take up the mantle of environmental protection and act as enforcers of the law.[2]

Notwithstanding any other provision of the Environmental Act, 1986 (hereinafter referred to as EP Act 1986), it is explicitly stated in Section 19 of the aforementioned legislation that in the event that any individual, whether

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[1]"Citizen Suits: The Teeth in Public Participation", 25 *Envtl. L. Rep (*1995)
[2]Aboud S. Jumbe, N. Nandini and Sucharita, "Legal Aspects of Surface Water Pollution in India: An Overview of Existing Statutory Framework in Management of Lake Ecosystem*", Proceedings of Taal* 2007: The 12th World Lake Conference: 1142-1148, p.1144."

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natural or juridical, contravenes any of the provisions of the Act or any orders or directives that have been issued pursuant thereto, such person shall be subject to prosecution in a court of law for the commission of a criminal offence.[3]Despite this stipulation not mandating a citizen to demonstrate any standing, an individual who is deeply wronged cannot directly appeal to the court. Instead, they must issue a notification to the entity accountable for pursuing legal action against the polluter and abide by a waiting period of sixty days from the moment it is received by a regulatory agency.[4]

Nevertheless, these stipulations were inadequate in catering to the populace's capacity-building instruments due to the subsequent rationales. First, the sixty-day prior notice gave a polluter enough time to legally get away with the purported environmental crime. The superfluous and prolonged duration of sixty days provides ample opportunity and time for a polluter to contaminate, deface, and disperse the proof. Secondly a citizen's sample is not legally admissible in the court of law. Solely a Regulatory Body for Pollution holds the authority to present an ecological specimen in a judicial system. In contrast to the United States, where a resident possesses the privilege to present an ecological specimen under oath and, thus, get that specimen accepted in a legal tribunal. This is not the case with India. The specimens procured might not retain their value for scrutiny following an extended duration, particularly when an individual plaintiff lacks the privilege of admittance to gather samples. Moreover, he cannot coerce a governing entity to obtain such specimens or authorise him to utilise any equipment to acquire them. The most detrimental impact of the notification period is that it may provide an empty avenue for certain ecological wrongdoers to evade accountability.[5]Furthermore, the predicament of a private prosecutor in this regard is even direr since, unlike authorised enforcers who possess extensive authority to enter, examine, and confiscate, the former lacks the ability to coerce a contaminating entity into revealing the identities of its accountable executives.

Furthermore, subsequent to issuing a notification to the regulatory entity, it is mandatory for him to attach and furnish corroborative proof in the form of pictures, scientific evaluations/medical evaluations of the vicinity pertaining to the purported contravention, in addition to the identity and domicile of the supposed transgressor.[6]The availability of such restricted data is deceptive and a mere facade. When a magistrate is presented with a private complaint alleging an offence, it is incumbent upon them to carefully scrutinise the complaint and conduct a thorough examination of both the complainant and any witnesses who may be present. If, after conducting this examination, the magistrate determines that there is insufficient evidence to support the complaint, they are empowered to summarily dismiss it without further ado.[7]Nonetheless, it cannot be denied that the data and facts gathered during the pre-litigation phase hold greater significance and are of utmost importance in ensuring the success of a lawsuit that would otherwise be doomed to failure if such information was not obtained beforehand, as opposed to the information that may be procured through subsequent discovery processes. Furthermore, certain ecological detriments may prove to be elusive and require heightened levels of data collection capabilities that are exclusively bestowed upon the governing agencies and not any individual enforcer operating in the private sector. The act of presenting purportedly factual information in a manner that would potentially qualify as a violation of environmental legislation is an exceedingly intricate and specialised process. According to the provisions of the Code of Criminal Procedure, it is the assertions of factual information that give rise to a criminal offence, and any assertions that fail to meet the threshold of constituting an offence would not be considered a valid complaint.[8]

Notwithstanding, in accordance with the Environmental Protection Act of 1986, it is incumbent upon the relevant authority, specifically the Pollution Control Board in this instance, to furnish pertinent reports that are within their possession upon request to any individual who seeks to lodge a complaint.[9]As per the regulations

[3]"Court consists of Judicial Magistrate of First Class or a Metropolitan Magistrate who is empowered to pass sentence of Imprisonment exceeding two years, fine exceeding Rs.2, 000 on any person convicted. S. 49(3) of Water Act and 43(2) of Air Act, 1981."
[4]"Similar provisions are found in Section 49 of Water Act 1974, section 43 of Air Act 1981 and section 56 of Wildlife protection Act, 1976."
[5]M. Ayub Dar, "Citizen's Suit", 4*KULR* 175(1997).
[6]The EP Rules, 1986, VI (Rule 11).
[7] The code of Criminal Procedure, 1973, s. 200, 203.
[8]*Chandra Deo Singh v. Prakash Chandra Bose*, AIR 1963 SC 1430.
[9] The EP Act, 1986, s.19 (2).

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set forth by the Under Water Act of 1974 and the Air Act of 1981, it is within the purview of the Board to decline the provision of reports to any individual if it is deemed by the Board that such an action would be contrary to the greater good of the public[10], thus adorned with complete prudence. Undoubtedly, the concern of the general public holds utmost significance and all other concerns must bow down to it. However, there should be certain measures in place to prevent rejections that are influenced by external factors. This complete secrecy scarcely appears to align with fundamental notion of fairness. To ensure equitable preservation of the ecosystem, impartiality must begin at the entryways responsible for ecological management on the governmental tier, so that those who oversee the surroundings are also monitored efficiently.

Furthermore, according to the aforementioned legislations, the Environmental Regulation Agency is a public entity and is subject to the Indian Law of Evidence which forbids an individual from disclosing any data conveyed to them in their official role. Furthermore, clauses 123 and 124 of the legislation suggest that the judiciary may be prohibited from obtaining records if the administration deems them to pertain to the interests of the nation or government. Likewise, the revisions implemented to the Commission of investigation Act, (1962) enable the Administration to retain data if it deems it to be in the welfare of the state or country.[11]Thus, ecological regulations on the one side ensure the entitlement to commence individual legal proceedings, but conversely, detract from it by offering an exemption for communal welfare.[12]

CURRENT LANDSCAPE OF CITIZEN'S SUITS AND ACCESS TO INFORMATION

Current State of Citizen's Suits

The present condition of lawsuits filed by individuals differs depending on the region, and judicial rulings influence the terrain. Rulings and verdicts made by courts have impacted the understanding and enforcement of legislations concerning lawsuits filed by individuals. These past examples can set significant concepts, elucidate existing prerequisites, determine the extent of legal actions, and offer direction on formal facets.

a) United States:

Environmental Laws: In the US, lawsuits brought by individuals are extensively acknowledged under diverse federal ecological statutes, like the Pure Air Act, Pure Water Act, and Resource Conservation and Recovery Act. These regulations grant individuals the privilege to litigate offenders, request restraining orders, and, in certain instances, pursue monetary damages.[13]

Standing Requirements: To initiate a civilian lawsuit, people or groups usually need to demonstrate that they have undergone or are probable to undergo a damage or injury due to the purported ecological transgression.

Notice and Waiting Periods: Certain laws mandate that individuals must give prior notification to the purported offender, governing bodies, or other pertinent entities prior to commencing legal proceedings. Delays might also be enforced, providing the accused offender a chance to rectify the infringement prior to initiating a legal action.

b) Other Jurisdictions:

International: The Aarhus Treaty, accepted by various nations, establishes a structure for civic involvement in ecological verdict-making and bestows individuals the entitlement to contest verdicts via legal or managerial procedures.

[10]The Air Act 1981 (Act 14 of 1981), s.43 (2) …….and The Water Act, 1974s. 19(2).
[11]Supra note 3, p.1145
[12]Supra note 5, p. 178
[13] J.A. Smith, "Empowering Citizens: The Role of Citizen's Suits in Environmental Protection" *ELR* (2019)

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National Laws: Numerous nations have included provisions for citizen's legal action in their ecological statutes, enabling private citizens or groups to file lawsuits against polluters or those breaching ecological regulations. The details of upright necessities, sequential measures, and solutions differ amidst nations.

Current State of Access to Information

Legal Frameworks

a) Freedom of Information Laws: Numerous nations have implemented laws on Freedom of Information (FOI) or Right to Information (RTI) that bestow upon individuals the privilege to obtain a vast array of data retained by governmental entities, encompassing ecological information.

b) Environmental Information Regulations: Certain regions have particular rules or statutes centred on obtaining ecological data. These structures establish the categories of data that ought to be accessible, the accountable parties for divulgence, and the protocols for obtaining the data.[14]

Access Mechanisms

a) Information Disclosure: Administrations and governmental bodies are progressively setting up digital platforms, repositories, and open records to offer convenient entry to ecological data. These channels might comprise of contamination statistics, evaluations of ecological influence, authorisations, implementation measures, and accounts regarding the condition of the surroundings.

b) Information Requests: Access to information can also be facilitated through formal information request processes. Inhabitants have the option to present petitions for particular ecological details to pertinent authorities, who are then obligated to reply within designated timeframes.

c) Advancements in Technology: Advancements in technology and digital platforms have improved access to environmental information. Authorities and institutions are employing electronic resources, information gateways, and transparent data programmes to improve openness and community entry to ecological information. This comprises furnishing up-to-the-minute surveillance information, interactive cartography, and data illustration instruments.

d) Civil Society Initiatives: Non-governmental organisations, green groups, and lobbying entities have a pivotal function in advancing the availability of ecological data. They participate in autonomous observation, carry out investigation, and cooperate with authorities to guarantee openness and liability.

It is noteworthy that the present condition of civil actions and availability of data can differ greatly among nations and localities. Every territory might possess its distinct lawful structures, customs, and obstacles linked to public empowerment and entry to ecological data. Performing an in-depth examination of the precise statutes and rules in a given region is crucial to grasping the full scope of litigation initiated by individuals and the ability to obtain data.[15]

PROS OF CITIZEN SUIT AND ACCESS TO INFORMATION

Increased Transparency: Lawsuits filed by individuals and disclosure of data encourage increased openness in ecological affairs. By enabling non-governmental entities or private citizens to initiate legal proceedings against contaminators or offenders of ecological regulations, citizen actions reveal environmental transgressions and

[14] "M.L. Johnson, "Access to Environmental Information: Enhancing Transparency in Governance" in S. Thompson (Ed.), *Environmental Governance: Perspectives and Approaches* 123-145, (ABC Publishing, 2020).
[15] "S. Braun, "Empowering Citizens: The Role of Citizen's Suits in Environmental Protection" 45-62 *ELR,* 32(3), (2018)

make those who damage the environment answerable. This openness aids in increasing consciousness regarding ecological concerns, promotes civic inspection, and stimulates conscientious ecological methodologies.

Strengthens Citizen's Right to Access Information: The ability to obtain knowledge is a crucial entitlement that enables individuals to form educated judgements and engage significantly in ecological decision-making procedures. Citizen suits and access to information laws provide mechanisms for individuals to obtain relevant environmental information held by public authorities. This empowers individuals to comprehend the condition of the surroundings, evaluate plausible hazards, and make government bureaux and contaminants responsible for their conduct. It enables people and societies to proactively participate in conservation endeavours for the environment.

Enhances Public Participation: Citizen Suits and access to information facilitate public participation in environmental governance. Through granting legal avenues for addressing ecological transgressions, citizen lawsuits enable people and societies to proactively safeguard their entitlements and the natural world. Entry to knowledge empowers individuals to participate in knowledgeable conversations, articulate their worries, and add to decision-making procedures associated with ecological concerns. This comprehensive method promotes a feeling of possession and accountability among inhabitants, resulting in more efficient and enduring ecological administration.

Acts as a Deterrent: The existence of citizen suits acts as a deterrent against potential environmental violations. Being aware that non-governmental entities or individuals possess the legal authority to commence legal proceedings and pursue redressal for ecological damage, those who contaminate or have the potential to breach regulations might exercise greater prudence in their conduct. This deterrent effect helps prevent environmental violations and encourages compliance with environmental laws and regulations.

Complements Government Enforcement Efforts: Civil actions and availability of data supplement official implementation endeavours in ecological affairs. They offer an extra level of supervision and responsibility, particularly in situations where government organisations may have restricted assets or encounter difficulties in implementing ecological regulations efficiently. Citizen suits can bridge the gap and ensure that environmental violations are addressed promptly, thus strengthening overall environmental protection efforts.[16]

Promotes Environmental Justice: Lawsuits filed by individuals and disclosure of data are crucial in advancing fairness in environmental matters. They enable underprivileged communities and individuals who are unfairly impacted by ecological damage to pursue legal action and insist on responsibility. These instruments aid in tackling environmental disparities and guaranteeing that all individuals have equitable entry to a hygienic and salubrious milieu.

In general, legal actions initiated by citizens and availability of data offer various advantages, such as heightened openness, reinforced civil liberties, improved civic involvement, prevention of ecological transgressions, supplementing official measures, and advocating for ecological equity. These instruments enable people and societies to safeguard the ecosystem, enforce responsibility on polluters, and promote sustainable and conscientious ecological administration.

CONS OF CITIZEN SUIT AND ACCESS TO INFORMATION

Potential for Abuse: One of the possible disadvantages of public interest lawsuits is the possibility of exploitation or baseless legal action. Permitting non-governmental entities or individuals to initiate legal proceedings against purported infringers of ecological regulations may create opportunities for exploitative or malevolent litigations. At times, civil actions by individuals can serve as a means for individual or financial

[16]R. J Williams.” Enhancing Transparency and Access to Information in Environmental Governance”. JEL 48(2), 267-285(2019).

benefit instead of authentic preservation of the environment.[17] Frivolous legal actions have the potential to overload the judicial system, squander valuable assets, and weaken the reliability of civil enforcement procedures.

Risk of Releasing Confidential Information: The laws that enable access to information, although essential for advancing openness, could also present difficulties concerning the revelation of private or delicate data. Public authorities might possess information or records that pertain to confidential business practises, exclusive data, individual confidentiality, or matters of state defence. Disclosing such details lacking proper precautions may result in inadvertent outcomes, such as probable damage to enterprises, persons, or civic well-being. Achieving the appropriate equilibrium between openness and safeguarding valid concerns is crucial in the context of information accessibility structures.

Burden on Regulatory Authorities: Lawsuits filed by citizens and regulations that guarantee access to data can create a weighty load on regulatory bodies that are accountable for addressing legal complaints and managing enquiries for information. Public authorities might encounter difficulties in handling and meeting their responsibilities within prescribed timeframes, particularly when there is a substantial amount of litigation or data enquiries. This may stress scarce resources and shift focus from other crucial regulatory duties, conceivably impacting the comprehensive ecological administration.

Delay in Resolving Environmental Issues: Citizen Suits and legal processes, including access to information requests, can be time-consuming. The necessity for advance warning, interim periods, and the official judicial procedure could cause postponements in handling pressing ecological concerns. The time taken to navigate the legal system and gather evidence can allow environmental harm to persist or escalate, potentially impacting ecosystems, public health, and communities.

Potential for Conflicting Interpretations: Citizen suits and access to information can lead to different interpretations and disputes over environmental laws or the disclosure of information.[18] Diverse outlooks regarding lawful obligations, eligibility standards, or the disclosure of particular information could bring about discrepant viewpoints amidst interested parties, resulting in legal disputes, additional setbacks, or a lack of transparency in tackling ecological concerns.

Resource Disparity: Lawsuits filed by individuals and the ability to obtain data can result in a disparity in wealth and legal knowledge among those who bring the case and those who defend it. Companies or organisations confronted with legal proceedings may possess larger monetary assets and legal counsel, affording them a benefit in legal disputes. This inequality may impact the capacity of individuals or groups to adequately seek lawful solutions or obtain pertinent data, potentially sabotaging the objectives of ecological impartiality and fairness.

To alleviate these possible downsides, it is crucial to find a middle ground between facilitating citizen autonomy and guaranteeing precautions against misuse. Prudent evaluation of eligibility criteria, fitting lawful protections, and streamlined procedures for handling citizen litigations and data enquiries can mitigate these apprehensions and uphold the authenticity of citizen-implemented enforcement systems.

IMPACT OF CITIZEN SUIT AND ACCESS TO INFORMATION ON ENVIRONMENTAL MATTERS

Overview of Impact

The influence of civil actions and availability of data regarding ecological issues has been noteworthy in moulding ecological administration, answerability, and civic involvement. Here is a summary of their influence:

[17] S.A. James, "Citizen's Suit: Empowering Individuals for Environmental Protection*" ELR*, 45(2), 123-145 (2020).
[18] A.L. Kris, "Access to Information and Transparency in Environmental Governance." JEL, 32(4), 567-589 (2021).

Environmental Protection and Compliance: Civil actions initiated by individuals have been pivotal in upholding ecological statutes and guidelines. By enabling people and groups to initiate legal proceedings against polluters or offenders, citizen lawsuits have acted as a preventive measure, promoting adherence to ecological criteria. The possibility of lawsuits and probable legal ramification have encouraged corporations and organisations to embrace more eco-friendly measures, resulting in better ecological conservation results.

Increased Public Awareness and Engagement: Lawsuits filed by civilians and availability of data have aided in increased public consciousness and involvement in ecological affairs. By offering channels for people and societies to obtain ecological data, inhabitants are more knowledgeable about the condition of the ecosystem, possible hazards, and effects on their fitness and welfare. This awareness enables them to involve in communal conversations, express apprehensions, and proactively engage in the process of making choices, cultivating a feeling of possession and accountability for ecological matters.

Transparency and Accountability: The regulations on information accessibility have encouraged openness in ecological administration. The populace can obtain pertinent information, documents, authorisations, and measures taken to ensure compliance, augmenting the openness of administrative determinations.[19] This transparency helps hold regulatory authorities, policymakers, and polluters accountable for their actions, as citizens can scrutinize and challenge decisions that may have adverse environmental impacts.

Environmental Justice: Lawsuits filed by private individuals and the ability to obtain data have played a role in promoting fairness in environmental matters. Underprivileged groups and people who are unfairly impacted by ecological damage have been capable of utilising these procedures to tackle environmental injustices and pursue compensation. Civil actions authorise societies to defend their entitlements and guarantee equitable entry to a hygienic and salubrious milieu, tackling ecological imbalances in a lawful and organised approach.

Strengthened Governance and Compliance: The presence of public interest litigations and availability of data has strengthened ecological management structures. Government agencies are motivated to implement ecological regulations efficiently, as the possibility of public litigation serves as an extra level of supervision. Entry to data empowers governing entities to form educated judgements and address public worries, cultivating a more see-through and responsible administration structure.

Innovation and Collaboration: Civil actions and availability of data can stimulate originality and teamwork in ecological administration. Through the provision of data to the general public, these systems establish possibilities for initiatives led by civilians, monitoring based on community involvement, and partnerships between citizens, scholars, and decision-makers. This collaboration can lead to the development of innovative solutions, sharing of best practices, and more inclusive decision-making processes.[20]

It is noteworthy that the influence of civil litigation and availability of data may differ among various regions, contingent on lawful structures, societal backgrounds, and the efficiency of execution. However, their overall influence has been crucial in propelling ecological conservation, civic participation, openness, liability, and the quest for ecological equity.

IMPACT IN TERMS OF TRANSPARENCY

Improved Public Awareness: Lawsuits filed by citizens and availability of data have greatly enhanced public consciousness concerning ecological concerns. By furnishing people and societies with entry to ecological data, these methods have enabled citizens to comprehend the condition of the ecosystem, possible hazards, and the activities of contaminators. The accessibility of data has eased a better-informed communal discussion and amplified comprehension of the significance of safeguarding the environment.

" Citizen's Suit: Empowering Individuals for Environmental Protection.",[19]United States Environmental Protection Agency(2019)

[20]M. Papadopoulou,"Access to Information and Transparency in Environmental Governance." Environmental Policy and Governance, 30(3), 145-165 (2020).

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Inhabitants have the opportunity to obtain details regarding contamination rates, evaluations of ecological influence, authorisations, and measures taken to enforce regulations, among other related data. This entry permits people to comprehend the gravity of ecological issues and take knowledgeable choices concerning their own conduct, like embracing sustainable habits or endorsing eco-friendly corporations. The heightened public consciousness generated by private legal actions and availability of data nurtures a shared feeling of accountability and promotes more ecological mindfulness.

Increased Government Accountability: Clarity is a foundation of government responsibility, and lawsuits by citizens and availability of data have had a noteworthy impact in making governments responsible for their ecological judgements and activities. These devices offer individuals the capacity to examine governmental activities, strategies, and implementation endeavours connected to ecological preservation.

Entry to knowledge empowers individuals to evaluate if governmental organisations are efficiently overseeing and implementing ecological guidelines. It empowers people and groups to assess the effectiveness of governing entities and demand responsibility for their deeds or lack of action. In case the governmental organisations fall short in dealing with ecological concerns or disregard their duties, individuals can resort to legal actions as a means to highlight these inadequacies and urge for measures.

The heightened clarity arising from public interest litigations and availability of data has aided in cultivating a climate of governmental answerability. Officials are prone to taking initiative in dealing with ecological issues, since they recognise that their conduct may be open to public inspection and possible legal consequences.[21] This responsibility guarantees that authorities give precedence to ecological preservation and take actions that correspond with the welfare of their populace and the ecosystem.

In general, private actions and availability of data have had a beneficial effect on openness. They have enhanced the general consciousness regarding ecological concerns and enabled individuals to make knowledgeable decisions. Furthermore, these systems have enhanced governmental responsibility, encouraging officials to be more open and forward-thinking in their ecological judgement and implementation endeavours. The amalgamation of enhanced communal consciousness and augmented governmental liability adds to a more lucid and receptive method to ecological administration.

IMPACT IN TERMS OF INCREASED ACCESS

Expansion of Available Government Records: Lawsuits by civilians and the ability to obtain data have resulted in a noteworthy enlargement of accessible official documents concerning ecological affairs. Regulations on information accessibility mandate that public institutions must actively reveal a vast array of ecological data, such as contamination statistics, evaluations of environmental impact, authorisations, measures taken to enforce laws, and evaluations of the condition of the environment.

This enlargement of obtainable governmental documents offers inhabitants with a plethora of facts that was formerly unattainable or challenging to acquire. It enables people and groups to possess an all-encompassing comprehension of ecological concerns and the measures implemented by governmental bodies to tackle them. By having greater entry to official documents, individuals can evaluate the efficiency of ecological measures, oversee adherence to rules, and pinpoint regions that require additional measures.

The accessibility of public documents via information retrieval mechanisms enables investigation, evaluation, and knowledgeable judgement by civilians, scholars, and promotion associations. It allows for the recognition of tendencies, designs, and possible regions of worry, resulting in increased efficient ecological support and proof-centered judgement.

[21] A.R. Benson,"The Power of Citizen's Suit: Environmental Activism in Action."*ELR,* 25(3), 45-68(2018).

Heightened Citizen Participation: Enhanced entry to data via civil lawsuits and information accessibility regulations has led to escalated public involvement in ecological affairs. Individuals are enabled to actively participate in talks, arguments, and decision-making procedures concerning ecological concerns.

With access to relevant information, citizens can contribute their perspectives, insights, and concerns during public consultations, environmental impact assessments, and policy development processes.[22] They have the ability to offer precious feedback grounded on their comprehension of the accessible data, guaranteeing that the process of making decisions is more comprehensive and reflective of a variety of concerns.

Increased public involvement nurtures a feeling of possession and accountability towards ecological concerns. Inhabitants are prone to engage in environmental conservation campaigns, charitable works, and locality-centered supervision once they acquire knowledge that allows them to comprehend the ecological predicaments at stake.

By enhancing the expression of public opinions, expanded availability of knowledge reinforces the democratic procedure, advocates for ecological equity, and guarantees that the selection of choices mirrors the necessities and ambitions of the societies impacted by ecological concerns. This public involvement aids in promoting comprehensive and enduring ecological policies and methods.

To sum up, private legal actions and the ability to obtain data have resulted in a broadening of accessible public documents concerning the ecology. This has granted the public with a more profound comprehension of ecological concerns and the measures executed by governmental organisations. Enhanced availability of data has additionally elevated public involvement, empowering people to actively participate in ecological decision-making procedures and contribute to more comprehensive and efficient ecological administration.

CONCLUSION

To sum up, private enforcement actions and availability of data have had a noteworthy effect on ecological issues. These devices have aided in amplified openness, reinforced civilian entitlements, and enhanced ecological administration.

Civil actions initiated by individuals have been crucial in upholding ecological regulations and ensuring that those who contaminate are answerable. They have served as a hindrance to ecological transgressions, nurtured communal consciousness, and advocated for conscientious environmental methodologies. By enabling individuals and groups to pursue legal recourse, citizen lawsuits have propelled environmental preservation and adherence.

The legislation on information retrieval has improved openness and responsibility of the authorities. Individuals have the ability to obtain a vast array of ecological data, empowering them to make knowledgeable choices and actively engage in ecological decision-making procedures. Enhanced entry to official documents has broadened communal consciousness, eased exploration and evaluation, and authorised inhabitants to participate in conversations and strategy establishment regarding ecological concerns.

Although citizen lawsuits and information accessibility may pose possible obstacles and disadvantages, like the likelihood of exploitation and the peril of disclosing classified data, these issues can be resolved through suitable judicial protections and streamlined procedures.

In general, legal actions taken by individuals and disclosure of data have had a beneficial effect on ecological issues, encouraging openness, community involvement, and fairness in environmental affairs. These systems have enhanced ecological management, amplified governmental responsibility, and encouraged a better-

[22] "L.K. Peterson, "Enhancing Access to Information for Environmental Governance." Journal of Environmental Policy and Planning, 32(4), 567-589, (2019)

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informed and involved public. Through enabling individuals and societies, civil actions and availability of knowledge have had a pivotal function in propelling ecological preservation and durability.

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INDIA'S ROLE IN THE GLOBAL FIGHT AGAINST CYBER CRIMES TARGETING CHILDREN

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Abstract

Children's inherent vulnerability, stemming from their ongoing cognitive and emotional development, makes them particularly susceptible to exploitation in the digital world. Their limited grasp of privacy and the implications of sharing personal information online heightens the risk of falling victim to predators who manipulate their innocence and trust. This vulnerability highlights the urgent need for education, awareness, and effective safeguards to protect children from the distinct dangers they face online.India plays a pivotal role in combating cybercrimes against children, focusing on strengthening its legal frameworks, enhancing international cooperation, and implementing targeted initiatives to protect minors in cyberspace. With the rise in cybercrimes such as exploitation, cyberbullying, and trafficking, India has responded by reinforcing laws like the Information Technology Act, of 2000, and the Protection of Children from Sexual Offences (POCSO) Act, 2012. India's active engagement in global conventions, such as the Convention on the Rights of the Child, and its participation in international law enforcement networks like INTERPOL, underscores its commitment to child safety online.This article explores the landscape of cybercrimes against youth by examining India's legal and regulatory frameworks in a global context. It delves into international conventions and treaties, comparing existing legal frameworks in the USA, Europe, and Australia. The goal is to identify gaps in current laws and propose measures to enhance the protection of children in the digital age.

Keywords: Children, Cybercrimes, International Instruments, Legislations, Social Media

INTRODUCTION

In today's interconnected world, the internet has become an integral part of children's lives, providing them with unprecedented opportunities for learning, socializing, and entertainment. However, this digital landscape also poses significant risks, as children are increasingly becoming targets of cyber crimes. Children's vulnerable nature is a defining characteristic of their early years, making them particularly susceptible to various forms of exploitation, especially in the digital world. This vulnerability is rooted in their ongoing cognitive and emotional development, which limits their ability to assess risks and recognize harmful intentions. Their natural curiosity and desire to explore can lead them into situations where they unknowingly expose themselves to danger. In the online environment, where the boundaries between safe and unsafe interactions are often blurred, children are at an increased risk of encountering predators who exploit their innocence and trust. Moreover, children's limited understanding of privacy and the implications of sharing personal information online further compounds their vulnerability[1]. They may not fully grasp the consequences of revealing details about their lives, such as their location, photos, or even their emotions, which can be manipulated by those with malicious intent. The anonymous and often deceptive nature of online communication makes it difficult for children to discern between trustworthy individuals and those who seek to harm them. This combination of factors underscores the importance of protecting children from the unique threats posed by the digital world, through education, awareness, and strong safeguards designed to shield their vulnerable nature from exploitation.

These crimes, perpetrated by digital predators, range from cyberbullying and online grooming to the distribution of child sexual abuse material (CSAM) and identity theft. Despite the growing threat, there remain significant gaps in laws and regulations aimed at protecting children from these dangers. Given that parents are often unaware of their children's online activities, children represent the most vulnerable segment of society and are frequently exploited in digital environments. In recent years, it has become increasingly evident that young

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[1]Sonia Livingstone, Mariya Stoilova & Rishita Nandagiri, Children's Data and Privacy Online: Growing up in a Digital Age, London School of Economics and Political Science, available at https://eprints.lse.ac.uk/101283/1/Livingstone_childrens_data_and_privacy_online_evidence_review_published.pdf (last visited Aug. 02, 2024).

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individuals are being subjected to sexual exploitation online[2]. Abusers engage in conversations with minors, misleading them regarding their true age in order to entice them into sexual encounters. The advent of advanced technology has significantly facilitated the ability of criminals to connect with children. Young and impressionable, these individuals are particularly susceptible as they heavily depend on social media platforms for social interaction. Offenders create fictitious identities on online networks to entice victims into face-to-face meetings. Consequently, there has been a rise in incidents of child abuse and exploitation, including "sex tourism" and "human trafficking." The identity of the person with whom the child is communicating remains unknown to them. Upon meeting the older individual, often in their forties or fifties, the child realizes the gravity of their error. Tragically, many children resort to suicide following the dissemination of their explicit images on social media.

UNDERSTANDING CYBER CRIMES AGAINST CHILDREN

In India,in accordance with NCRB data published in 2022, “the total number of cases where children have been victims of cybercrimes stands at 1,823, posting a 32 percent increase from the previous year’s data which stood at 1,376”[3].According to UNICEF, the increase in children's screen time during the COVID-19 pandemic has not only jeopardized their online safety but also heightened their exposure to offensive language and harmful content. Alarmingly, over a third of young people across 30 countries report experiencing cyberbullying, with 1 in 5 admitting they have skipped school because of it. Additionally, around 80% of children in 25 countries express concerns about the threat of online sexual abuse or exploitation. In 2022, cybercrimes against children surged by 20%. Disturbing data from the “Federal Bureau of Investigation (FBI)” reveals that seven underage victims are at risk each day.[4]

According to Article 1 of the Convention on the Rights of the Child 1989, “a child means every human being below the age of eighteen years unless under the law applicable to the child, majority is attained earlier.”[5] Young people are at the forefront of global connectivity, with 79% of those aged 15 to 24 being online in 2023, compared to 65% of the overall global population. Additionally, children are spending more time online than ever, and they are beginning to do so at an earlier age. Remarkably, around the world, a child goes online for the first time every half second.

Accessibility and anonymity are critical elements that empower cybercriminals in their exploitation of children. The widespread availability of digital platforms and tools provides easy access to potential victims, allowing criminals to operate across borders and target children in different parts of the world. This anonymity reduces the risk of detection and prosecution, making it easier for them to engage in illicit activities such as grooming, exploitation, and trafficking. The combination of easy access to digital spaces and the ability to remain hidden creates a dangerous environment where crimes against children can be committed with alarming efficiency and frequency.

A research study conducted by McAfee revealed that children in India reach mobile maturity at an exceptionally young age and face considerably higher online risks than their global peers. The study found that among Indian children aged 10 to 14, the adoption of mobile technology happens at a faster rate than in most other regions. Additionally, the study discovered that 48% of the surveyed children in India regularly or occasionally engage in private conversations without knowing the true identity of the person they are talking to, a figure that is 11% higher than the global average.[6]

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[2]Rahul, Shaifali Choudhary, & Maryam Azhari, Crime Against Children in Cyber Space in India: A Snapshot, GAP iNTERDISCIPLINARITIES: A Global Journal of Interdisciplinary Studies, ISSN 2581-5628, Impact Factor: SJIF - 5.047, IIFS - 4.875.

[3] "Cybercrimes Against Children See 32% Rise in a Year: NCRB Report Shows," Deccan Herald (Aug. 29, 2022), available at https://www.deccanherald.com/india/cybercrimes-against-children-see-32-rise-in-a-year-ncrb-report-shows-2799597 (last visited Aug. 12, 2024).

[4]"FBI Warns of Rising Cybercrime Targeting Children", CyberNews (2024), available at https://cybernews.com/news/fbi-children-cybercrime-rising/ (last visited Aug. 12, 2024).

[5]Convention on the Rights of the Child, UNICEF, available at https://www.unicef.org/child-rights-convention/convention-text#:~:text=Article%201,child%2C%20majority%20is%20attained%20earlier (last visited Aug. 13, 2024).

[6]Leena Kejriwal, The Ignored Threat of Online Child Trafficking from Urban Homes, TOI Voices (July 18, 2023), available at https://timesofindia.indiatimes.com/blogs/voices/the-ignored-threat-of-online-child-trafficking-from-urban-homes/ (last visited Aug. 12, 2024).

Cyber-crimes against children encompass a wide range of illegal activities, all of which exploit the internet or digital technologies to target minors. These crimes can be broadly categorized into the following types:

CYBERBULLYING

According to a study conducted by WHO, "15 percent of boys and 16 percent of girls reported experiencing cyberbullying at least once in recent months" . A WHO Europe report released on Wednesday, covering 44 countries, indicated that "16 percent of children aged 11 to 15 were cyberbullied in 2022", an increase from 13 percent four years earlier. Hans Kluge WHO regional director for Europe alleged in a statement, "This report is a wake-up call for all of us to address bullying and violence, whenever and wherever it happens."[7]Cyberbullying involves the use of electronic communication to bully, harass, or intimidate a child. It can take various forms, including sending threatening messages, spreading rumors online, or posting embarrassing photos or videos. Research has consistently shown that cyberbullying can have profound negative effects on an individual's health, leading to severe emotional distress, psychological issues, and psychosomatic disorders.[8]" Cyberbullying involves aggressive actions carried out by individuals or groups in cyberspace using information and communication technologies—such as email, text messages, chat rooms, and social networks—either repeatedly or over an extended period. These actions target victims who have difficulty defending themselves." [9] Various techniques are used by the perpetrators of cyberbullying to carry on their activities. Cyberbullying commonly occurs in a few defined settings. Social media platforms, such as Facebook, Instagram, Snapchat, TikTok, WhatsApp, VChat, and Skype, provide avenues for communication alongside text messaging and messaging apps available on mobile or tablet devices. Additionally, online forums, chat rooms, and message boards, like Reddit, offer spaces for discussion. Email remains a common form of communication, and online gaming communities serve as another platform for social interaction.

Bullying involves unwanted, aggressive, and antisocial behavior among school-aged children, including those who commit cyberbullying against their classmates. This behavior often includes teasing, embarrassing, body shaming, making inappropriate remarks toward girls, or disclosing private information to cause distress. Such actions are typically repeated by the perpetrator. The after effect of these are multifarious. The effects of cyberbullying on children can be profound and enduring, deeply impacting their emotional, psychological, and social well-being. Victims often experience intense emotional distress, including sadness, anxiety, and fear, which can lead to withdrawal, loss of interest in activities, and signs of depression. Repeated bullying can significantly damage a child's self-esteem, resulting in feelings of inadequacy and self-doubt. Academically, the stress from cyberbullying can lead to poor concentration, declining grades, and a lack of motivation to attend school. Socially, victims may isolate themselves to avoid further bullying, leading to loneliness and alienation. [10]The emotional impact often manifests physically through symptoms like headaches, stomachaches, and sleep disturbances. Over time, prolonged exposure to cyberbullying can result in chronic anxiety, depression, and, in severe cases, suicidal thoughts or behaviors. Some children may respond with aggressive behavior or turn to substance abuse as a coping mechanism, while others may develop trust issues, making it difficult to form or maintain relationships[11].

ONLINE GROOMING

Online grooming refers to the process by which an adult builds an emotional connection with a child online to gain their trust for the purpose of sexual exploitation. Groomers often use social media platforms, chat rooms, and gaming sites to target vulnerable children, manipulate them, and eventually coerce them into meeting in

[7]Almost 1 in 6 Children Are Cyberbullied: WHO Report, Hindustan Times, available at https://www.hindustantimes.com/world-news/almost-1-in-6-children-are-cyberbullied-who-report-101711530458446.html (last visited Aug. 13, 2024).
[8]Linda Beckman, Curt Hagquist, and Lisa Hellstrom, Does the Association with Psychosomatic Health Problems Differ Between Cyberbullying and Traditional Bullying?, Emotional and Behavioral Difficulties, 17(3-4):421–434, 2012.
[9]Dorothy L. Espelage & Susan M. Swearer, Research on School Bullying and Victimization: What Have We Learned and Where Do We Go from Here?, School Psychology Review, 365–383 (2013).
[10]What Are the Effects of Cyberbullying?, Parents, available at https://www.parents.com/what-are-the-effects-of-cyberbullying-460558 (last visited Aug. 12, 2024).
[11]The Impact of Cyberbullying on Children, National Center for Biotechnology Information (2024), available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4126576/ (last visited Aug. 12, 2024).

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person or engaging in sexual activities online[12]. Online predators utilize social media sites, chat rooms, and online gaming platforms to establish trust with children. Kids are frequently the most at risk and prime target on the internet. Many times, children unknowingly become victims of the pornographic industry as predators use the internet to fulfill their dark desires. Paedophilia is described as “the imagination or engagement in sexual behavior with children typically below the age of 13”. These predators partake in grooming, where they befriend and emotionally manipulate children in order to reduce their inhibitions for sexual activity.

Paedophiles employ different strategies to groom children, such as engaging in private conversations, seeking personal details, sharing explicit material, and diminishing the child's hesitancy to participate in sexual acts. At times, online grooming has progressed to face-to-face meetings, resulting in serious outcomes. In a metropolitan city in India in 2020, a specific instance exemplifies the risks associated with online grooming and sexual exploitation. A 14-year-old boy, who goes by the name Rahul to protect his privacy, was approached on a gaming platform by someone pretending to be a teenage girl and befriended him. For many months, the offender slowly built a relationship of trust with Rahul and manipulated him into revealing personal details and explicit photos. The predator warned Rahul that he would expose the inappropriate material and cause harm to his family if he did not meet additional requests. Feeling scared and confined, Rahul complied with the predator's requests, ultimately leading to being financially exploited.Upon noticing peculiar withdrawals from Rahul's bank account, his parents confronted him about it, leading him to finally disclose the cyber exploitation he had been subjected to.

DISTRIBUTION OF CHILD SEXUAL ABUSE MATERIAL (CSAM)

People can now produce and disseminate child sexual abuse content without needing anybody else to confirm their identity because of the Internet's explosive expansion. However, by permitting the distribution of such content without any form of authentication, this development made it possible for children to be exploited.[13] Sexual exploitation that involves the assault or filming of a kid is known as child sexual exploitation and abuse (CSAM). Child Sexual Abuse (CSA) is defined by the World Health Organization (WHO), a specialized organization in charge of public health, as “the relationship between young people in sexual development that the adult doesn't fully understand, can't consent to, or for which the child isn't developmentally mature enough to give consent, or that disobeys the established laws or Child sexual abuse is a serious issue that affects people all over the world”.[14] It can take many different forms, such as inviting a child to touch or be touched sexually, fondling, having sex, involving a child in prostitution or pornography, etc (Babcock and Tomicic, 2006)[15].The manufacture and exchange of CSAM was referred to as a "cottage industry" by Sir William Utting[16] in a 1997 report on child sexual abuse in orphanages and other residential facilities for children being looked after, usually by state organizations.[17] The Internet Watch Foundation in its 2022 Annual Report, indicated “Europe remains the largest source of CSAM hosted online, accounting for 66% of the global total, with 18% traced to Asian countries, and 16% to North America”.[18]

IDENTITY THEFT AND FRAUD

Digital identity theft involves a malicious actor unlawfully obtaining personal information, such as a date of birth, social security number, or credit card details, and using it to commit identity fraud, such as cloning credit

[12]Monahan, K., Sexual Violence - Issues in Prevention, Treatment, and Policy, Intech Open eBooks, available at https://doi.org/ 10.5772/intechopen.104346 (last visited Aug. 12, 2024).
[13]Child Pornography: Model Legislation & Global Review, International Centre for Missing & Exploited Children, available at https://www.icmec.org/child-pornography-model-legislation-report/ (last visited Aug. 12, 2024).
[14]Sanjay Gautam, Himanshu Khajuria, Reeta Gupta, & Biswa Nayak, Recent Trends in Child Sexual Abuse Material (CSAM) Distribution in Indian Cyberspace, International Journal of Cyber Warfare and Terrorism, 12, 1-15 (2022), available at https://doi.org/ 10.4018/ IJCWT.297857.
[15]Protecting Children Online: Government and International Efforts, Government of Canada, available at https://publications.gc.ca/ collections/Collection/H72-22-2-2004E.pdf (last visited Aug. 12, 2024).
[16] First Chief Inspector of Social Services for England
[17] Ending Violence Against Children: Online Abuse and Exploitation, United Nations Office on Drugs and Crime, available at https://www.unodc.org/pdf/criminal_justice/endVAC/EGM/EGM_CSAM_Removal_Background_Paper.pdf (last visited Aug. 12, 2024).
[18]Annual Report 2022: Trends and Data on Online Child Exploitation, Internet Watch Foundation, available at https://annualreport2022.iwf.org.uk/trends-and-data/geographical-hosting-urls/ (last visited Aug. 12, 2024).

cards, applying for loans, or extorting the victim.[19] While online identity theft operates similarly to offline methods, the key distinction lies in the vast amount of detailed information that attackers can easily access on the Internet, making their task considerably easier and far more profitable. Children are also vulnerable to identity theft, where their personal information is stolen and used for fraudulent purposes. Because minors' credit histories are typically clean, they are attractive targets for criminals who may open bank accounts, apply for loans, or commit other forms of fraud using the stolen identity.

In 2021, 1.25 million children fell victim to identity theft, marking a 25% increase from the 1 million cases reported in 2017, according to a Javelin study[20]. This statistic indicates that one in every 50 children experienced identity fraud in the year 2021[21].Even fingerprints can be exploited for identity theft. Personal data obtained through a fake biometric device can lead to a significant breach of privacy. If someone's fingerprints fall into the wrong hands, criminals could use them to commit fraud and profit in the victim's name.

THE LEGAL FRAMEWORK IN INDIA

India has witnessed a significant rise in cybercrimes targeting children, largely driven by the rapid expansion of internet access and the widespread adoption of digital devices. The availability of affordable smartphones, high-speed internet, and numerous digital platforms has led to a surge in online activity among children. While these technologies offer valuable educational and recreational opportunities, they also increase the risk of exposure to online threats, including cyberbullying, online grooming, and inappropriate content. The anonymity of the internet has made it easier for predators to engage in online grooming, where they manipulate and build trust with children to exploit them sexually or for other purposes. Social media platforms, chat rooms, and gaming sites are frequently used by these criminals, who often conceal their true identities to lure and exploit young users.Children often lack the understanding of how to protect their personal information online, and they may inadvertently share sensitive data, such as their home address or school details. Increased online time makes children more susceptible to radicalization, potentially leading to dangerous behaviors and extremist beliefs.

THE INFORMATION TECHNOLOGY ACT, 2000

The Information Technology (IT) Act, 2000, is the primary legislation governing cyber crimes in India. It provides the legal framework for addressing offenses such as hacking, identity theft, and the distribution of obscene material online. The Act was amended in 2008 to include provisions specifically targeting cyber crimes against children.

Section 67B explicitly addresses offenses related to child pornography. It prohibits the publishing, browsing, or downloading of material depicting children in sexually explicit acts. Violators can face up to five years of imprisonment and a fine for the first conviction, with harsher penalties for subsequent offenses.

Section 66Cspecifically targets cybercrimes involving identity theft. It prescribes penalties for individuals who deliberately and fraudulently use another person's personal information, such as passwords or electronic signatures.

Section 66E of the IT Act penalizes the violation of privacy by capturing, publishing, or transmitting the image of a private area of any person without their consent, with a punishment of up to three years in prison and a fine.

THE PROTECTION OF CHILDREN FROM SEXUAL OFFENCES (POCSO) ACT, 2012

The POCSO Act is a comprehensive law designed to protect children from sexual abuse, harassment, and exploitation. Although it is primarily focused on physical sexual offenses, the Act also covers certain cyber crimes, such as the use of electronic communication to sexually exploit or harass a child.

[19]Digital Identity Theft: A Growing Threat to Children, Bitdefender, available at https://www.bitdefender.com/cyberpedia/what-is-digital-identity-theft/ (last visited Aug. 12, 2024).

[20]Child Identity Fraud Costs Nearly $1 Billion Annually, Javelin, available at https://javelinstrategy.com/press-release/child-identity-fraud-costs-nearly-1-billion-annually-according-new-study-javelin (last visited Aug. 12, 2024).

[21]Who's Protecting Our Kids from Online Threats?, Forbes Tech Council (2022), available at https://www.forbes.com/councils/forbestechcouncil/2022/09/14/whos-protecting-our-kids-from-online-threats-in-the-digital-era/ (last visited Aug. 12, 2024).

Section 11 of the POCSO Act defines sexual harassment, which includes any action or gesture that involves sexually explicit acts or words, whether in person or through electronic communication.

Section 14 deals with child pornography and penalizes the use of children in the creation, distribution, or browsing of child pornography, with stringent punishments.

THE JUVENILE JUSTICE (CARE AND PROTECTION OF CHILDREN) ACT, 2015

The Juvenile Justice Act provides for the care, protection, and rehabilitation of children in conflict with the law or in need of care and protection. The Act also includes provisions to address cyber-crimes against children, particularly those involving the exploitation of minors.

Section 74 of the Act prohibits the disclosure of the identity of a child involved in any form of media, including social media, which is crucial in cases of cyberbullying and online harassment. In instances of cyberbullying and online harassment, children are particularly vulnerable, and public exposure can lead to further emotional distress, social stigmatization, and even long-term psychological trauma. Moreover, this provision is intended to create a safer online environment for children, deterring malicious actors from exploiting minors while ensuring that media outlets, social media platforms, and individuals exercise caution when handling information related to children

THE DIGITAL PERSONAL DATA PROTECTION ACT, 2023

The Digital Personal Data Protection Act, 2023 (DPDPA) introduces robust safeguards to protect children's privacy in India. Section 7 of the Act provides that consent for data processing must be provided by a guardian for individuals under the age of 18. This provision underscores the importance of parental oversight in the digital activities of minors. The Act mandates that data fiduciaries, who are entities responsible for processing personal data, must obtain explicit consent from a child's guardian before processing any personal data belonging to a minor. This ensures that parents or guardians have control over the information collected and processed about their children. Furthermore, the Act introduces the concept of Significant Data Fiduciaries (SDFs)—data fiduciaries that handle the personal data of children or offer services directly to minors. SDFs are subject to additional obligations under the DPDPA, which may include mandatory registration with the Data Protection Authority (DPA), compliance with stricter data protection standards, and periodic audits to ensure adherence to the law. Overall, the DPDPA emphasizes the protection of children's privacy and imposes stringent requirements on entities that handle their data, aiming to create a safer digital environment for minors in India.[22]

INTERNATIONAL INSTRUMENTS

India is a signatory to several international conventions and treaties that aim to protect children from cyber crimes and promote their rights in the digital age. These international instruments provide a global framework for combating cyber-crimes against children and ensuring their safety online.

Convention on the Rights of the Child (CRC), 1989

The CRC is the most comprehensive international treaty on children's rights, and India ratified it in 1992. Article 19 of the CRC obligates states to protect children from all forms of physical or mental violence, injury, or abuse, including online abuse. The CRC also emphasizes the importance of protecting children's privacy and ensuring their access to information that is appropriate for their age and maturity. The CRC's provisions aim to prevent such crimes, provide protection and support to victims, and ensure that perpetrators are held accountable, all while emphasizing the best interests of the child as a guiding principle in all actions concerning children. CRC

[22]Digital Personal Data Protection Act, 2023, Ministry of Electronics and Information Technology, Government of India, available at https://www.meity.gov.in/writereaddata/files/Digital%20Personal%20Data%20Protection%20Act%202023.pdf (last visited Aug. 12, 2024).

has had a significant impact on the formulation of laws and policies aimed at protecting children from various crimes. India ratified the CRC in 1992, and since then, the principles enshrined in the Convention have influenced numerous legislative and policy developments in the country. With the rise of digital technologies, India has also taken steps to protect children from online exploitation, in alignment with the CRC.

Optional Protocol to the CRC on the Sale of Children, Child Prostitution, and Child Pornography (OPSC), 2000

The OPSC supplements the CRC by specifically addressing the sale of children, child prostitution, and child pornography. It requires states to criminalize these offenses and take measures to prevent and combat them. India ratified the OPSC in 2005, and its provisions are reflected in domestic laws such as the POCSO Act and the IT Act. India ratified the Optional Protocol on the Sale of Children, Child Prostitution, and Child Pornography on August 16, 2005, reinforcing its commitment to combating these severe crimes against children. In response, India has enacted several key legislative measures to align its national framework with the Protocol's obligations. The Protection of Children from Sexual Offences (POCSO) Act, 2012, stands out as a cornerstone in India's legal approach, criminalizing a broad range of sexual offenses against children and ensuring stringent penalties for offenders. This Act, along with the Immoral Traffic (Prevention) Act, 1956 (ITPA), which addresses trafficking and prostitution, and the Information Technology (IT) Act, 2000, which targets online child pornography, forms a robust legal structure aimed at protecting children from exploitation. The Juvenile Justice (Care and Protection of Children) Act, 2015, complements these efforts by focusing on the care, protection, and rehabilitation of child victims.

The Cyber Crime Prevention against Women and Children (CCPWC) Scheme, launched by the Ministry of Home Affairs, strengthens India's response to cybercrimes, including those related to child pornography, by establishing cybercrime units and enhancing law enforcement capabilities. These initiatives reflect India's ongoing commitment to upholding the rights and dignity of children in accordance with the Optional Protocol.

WeProtect Global Alliance

The WeProtect Global Alliance[23] is atransnational initiative aimed at combating online child sexual exploitation. India is a member of the alliance, which brings together governments, the private sector, and civil society organizations to develop and implement strategies to protect children online. The alliance focuses on enhancing legal frameworks, improving law enforcement capabilities, and promoting public awareness to prevent and respond to online child sexual exploitation.

COMPARATIVE ANALYSIS: LEGAL FRAMEWORKS IN THE USA, EUROPE, AND AUSTRALIA

To understand the global context of cyber crimes against children, it is essential to examine the legal frameworks and regulations in other countries, particularly the USA, Europe, and Australia. These regions have developed comprehensive legal and regulatory measures to protect children from cyber crimes, and their experiences offer valuable lessons for India.

United States of America

The USA has a robust legal framework for addressing cyber crimes against children, with multiple federal and state laws designed to protect minors from online predators.

Children's Online Privacy Protection Act (COPPA), 1998: COPPA is a federal law that regulates the collection, use, and disclosure of personal information from children under the age of 13 by online services and websites. It requires operators to obtain verifiable parental consent before collecting data from children and mandates that they provide clear privacy policies.

[23] *WeProtect Global Alliance*, available at https://www.weprotect.org/ (last visited Aug. 17, 2024).

Protect Our Children Act, 2008: This Act established the National Internet Crimes Against Children (ICAC) Task Force Program, which supports law enforcement agencies in investigating and prosecuting cyber crimes against children. The Act also enhanced penalties for offenses involving child exploitation.

Adam Walsh Child Protection and Safety Act, 2006: This Act includes provisions for monitoring sex offenders and combating child pornography. It also established the National Sex Offender Registry and mandated the registration of convicted sex offenders.

European Union

The European Union (EU) has developed a comprehensive legal framework to protect children from cyber crimes, with a focus on harmonizing laws across member states and ensuring the safety and privacy of minors online.

General Data Protection Regulation (GDPR), 2018: The GDPR is a landmark regulation that strengthens data protection and privacy rights in the EU. "It includes specific provisions for the protection of children's data, requiring parental consent for processing the personal data of children under the age of 16 (or a lower age, as determined by individual member states)".[24]

Directive on Combatting the Sexual Abuse and Sexual Exploitation of Children and Child Pornography, 2011: This Directive requires EU member states to criminalize the sexual abuse and exploitation of children, including online offenses. It also mandates the removal of CSAM from the internet and provides for victim support and assistance.

Safer Internet Programme: The EU's Safer Internet Programme, now part of the Connecting Europe Facility, promotes the safe and responsible use of the internet by children and young people. It supports awareness-raising activities, helplines, and the development of tools to protect children online.

Australia

Australia has implemented a range of laws and initiatives to combat cyber crimes against children, with a focus on prevention, education, and enforcement.

Enhancing Online Safety Act, 2015: This Act established the Office of the eSafety Commissioner, which is responsible for promoting online safety, particularly for children. The eSafety Commissioner has the authority to take action against cyberbullying and the distribution of CSAM, including the removal of harmful content from websites and social media platforms.

Criminal Code Act, 1995: The Criminal Code Act includes provisions that criminalize a wide range of offenses involving the exploitation of children online, such as the production, distribution, and possession of CSAM, as well as online grooming and cyberstalking.

Online Safety Youth Advisory Council: This initiative brings together young people to provide advice on online safety issues, ensuring that their voices are heard in the development of policies and programs aimed at protecting children from cyber crimes.

IDENTIFYING CHALLENGES, MITIGATING GAPS, AND FOSTERING LEGAL PROGRESS

Despite the existence of legal frameworks in India and around the world, significant gaps remain in the protection of children from cyber crimes. These gaps can be attributed to various factors.

[24] *GDPR-info.eu*, Article 8 GDPR, https://gdpr-info.eu/art-8-gdpr/ (last visited Mar. 3, 2025).

Jurisdictional Challenges

Cybercrimes often transcend national borders, making it difficult to determine jurisdiction and enforce laws. This is particularly problematic in cases involving the distribution of CSAM or online grooming, where perpetrators and victims may be located in different countries. International cooperation is essential to address these challenges, but existing mechanisms are often slow and ineffective. The transnational nature of cybercrimes involving CSAM and online grooming necessitates robust international cooperation and streamlined legal processes. While existing mechanisms like INTERPOL and the Budapest Convention offer some solutions, the effectiveness of these tools is often limited by slow procedures and varying national laws. Enhanced international collaboration and the development of more efficient legal frameworks are crucial to overcoming these challenges and ensuring that cybercriminals are held accountable regardless of where they operate.

Rapid Evolution of Technology

The swift and relentless pace of technological advancement poses a substantial challenge for lawmakers and regulators in maintaining up-to-date legal frameworks. As new digital platforms, applications, and communication tools emerge rapidly, existing laws and regulations often struggle to keep pace, resulting in significant gaps in protection, particularly for children. The speed at which technology evolves means that new social media platforms, messaging apps, and online services can become widespread within a short period, often before lawmakers have had the opportunity to fully understand their implications or develop appropriate regulations. This is evident with the rise of encrypted messaging apps and anonymous platforms, which create new avenues for online grooming and the distribution of Child Sexual Abuse Material (CSAM), potentially outstripping the scope of existing laws. Additionally, the complexity and diversity of digital platforms complicate the regulatory process. Each platform may have unique features, privacy settings, and user interactions, making it challenging to craft regulations that address all potential risks effectively.

The rapid emergence of new and sophisticated threats, such as deepfakes and virtual reality abuse, further exacerbates the challenge. To address these challenges, several strategies can be implemented. Lawmakers should prioritize the development of flexible and adaptive legal frameworks that can quickly respond to technological advancements. This approach involves creating broad, principle-based laws that can accommodate new technologies without becoming outdated as quickly. By engaging with technology experts, lawmakers can gain insights into emerging technologies and their potential risks, facilitating the creation of more effective regulations. Public-private partnerships can further support this effort by fostering the sharing of knowledge and resources. International treaties and agreements, such as the Budapest Convention, can help harmonize regulations and improve cross-border enforcement, making it easier to address crimes that involve multiple jurisdictions.

Regular updates to legal frameworks, in response to new technological developments and emerging trends in cybercrime, are essential to ensure ongoing effectiveness in protecting children from digital exploitation. By adopting these measures, lawmakers and regulators can better keep pace with technological advancements and create legal systems that more effectively safeguard children from the evolving risks of the digital age.

CONCLUSION

Cyber-crimes against children represent a growing and complex challenge that requires a multifaceted response. While legal frameworks in India and around the world provide a foundation for protecting children in the digital space, significant gaps remain in law and regulation. These gaps must be addressed through international cooperation, technological innovation, public awareness, and the strengthening of law enforcement capabilities. While legal frameworks are essential, they are not sufficient on their own to protect children from cybercrimes. Public awareness and education are crucial in preventing these crimes and ensuring that children, parents, and

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educators are equipped with the knowledge and tools to stay safe online. However, awareness campaigns and educational initiatives are often underfunded and lack the reach necessary to make a significant impact. Law implementation agencies every so often lack the resources, training, and technology needed to effectually explore and arraign cyber-crimes against children. This is particularly true in developing countries, where budgets for cybersecurity and child protection are limited. Strengthening the capacity of law enforcement is critical to closing the gap between legal frameworks and their enforcement. As digital predators continue to exploit the vulnerabilities of children online, it is imperative that governments, civil society, and the private sector work together to create a safer and more secure digital milieu for the next generation. By closing the gaps in law and regulation and adopting a holistic approach to child protection, we can ensure that children are shielded from the dangers of the digital world and are free to explore its opportunities safely and securely.

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HUMAN TRAFFICKING: AN INHUMAN ACT WITH HUMANS MAKING IT A GLOBAL CRISIS

Ranjana Singh*

Abstract

Human trafficking is a dynamic, multidimensional crime that can happen in a variety of contexts and is hard to spot. Despite decades of international efforts to combat human trafficking, the issue nevertheless persists due to its complexity. Several scholarly investigations have underscored the imperative nature of a multi-sectoral approach in the fight against human trafficking, which includes fortifying the legal framework, enhancing public consciousness, and providing aid to victims.

This study presents information on victim detection, demographic makeup, and trafficking aims while analyzing trends in human trafficking from 2003 to 2022. The overall number of victims of human trafficking which has been identified increased from 30,961 in 2008 to 115,324 in 2022. Additionally, it looks at the age and gender distribution of the victims, revealing a notable change from 74% of women in 2004 to 42% in 2020, while the percentages of girls, boys, and men grew. In addition, the proportion of men to women shifted from 16% in 2004 to 40% in 2020. The causes of trafficking, with forced labor increasing from 18% to 39% over the same period and sexual exploitation declining from 79% in 2006 to 39% in 2020. The number of other causes rose from 3% to 22%. The number of victims of forced labor identified per 100,000 increased from 0.02 in 2003 to 0.37 in 2020, a significant rise from 2017. The detection rate of sexual exploitation increased from 0.15 in 2003 to 0.37 in 2020, with a peak detection rate of 0.48 in 2019. However, this increase was not constant. These results emphasize the changing victim demographics and rising detection rates that demonstrate the dynamic evolution of human trafficking.

Keywords: Human trafficking, Forced labour, Sexual exploitation, Victim composition, Global trends, Global crisis.

INTRODUCTION

The recruitment, transportation, transfer, harboring, or receipt of people through the use of threats, actual or threatened force, other forms of coercion, abduction, fraud, deception, abuse of authority or vulnerability, or the payment or receipt of benefits in exchange for the consent of someone in a position of control over another person to exploit them are all considered forms of human trafficking. At the very least, exploitation should involve the use of another person for sexual purposes or prostitution, forced labor or services, slavery or acts comparable to it, servitude, or organ harvesting[1] [2].

Human trafficking is a dynamic, multifaceted crime that can occur in many different settings and is challenging to identify. The lack of trustworthy, high-quality data about the scope of human trafficking and the characteristics of victims is one of the biggest obstacles to creating focused counter-trafficking strategies and assessing their effectiveness. Human trafficking has been addressed as an important issue and a major challenge in sustainable development goals, having different targets in 5.2, 8.7 as well as in 16.2[3].

According to the website Disrupt human trafficking, one of the most horrendous crimes is human trafficking. On average 25 million people are trafficked annually including males, females, and children. The traffickers are earning approximately $150 billion from this trafficking business, showing one of the most profitable illegal

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[1] About human trafficking - United States Department of State. (2023, January 18). United States Department of State, available at https://www.state.gov/humantrafficking-about-human-trafficking

[2] Najar, J. L. (2014b). Human trafficking in India.ResearchGate available.https://www.researchgate.net/publication/303276513_Human_Trafficking_in_India/link/573ac71708ae9ace840ddf55/download?_tp=eyJjb250ZXh0Ijp7InBhZ2UiOiJwdWJsaWNhdGlvbiIsInByZXZpb3VzUGFnZSI6bnVsbH19

[3] Human trafficking. (2024, January 10). Statista Available at https://www.statista.com/topics/4238/human-trafficking/

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industries. According to the website Slavery today, 21 million to 45 million people are trapped in some form of slavery, it may be for domestic services, sex trafficking, forced labour, bonded labour, child labour, and forced marriage.

Ecker E. [4](2022) reports on the International Labour Organization's (ILO) estimates, highlighting that there were 24.9 million victims of human trafficking globally. This figure includes both forced labor (state-imposed and private) and sex trafficking[5]. In 2016, the ILO found that 20.1 million were victims of labor trafficking, which involves coercion into work under threat of punishment or harm, commonly in domestic work, farming, or factories. Of these, 10.9 million were female, 9.2 million male, and 3.3 million children. Additionally, 4.8 million people were exploited for commercial sex, including 1 million minors and 3.8 million adults, with 99 percent of these victims being female. The forms of trafficking vary globally based on regional traditions and individual circumstances.

Humans are trafficked for a variety of purposes, including forced marriage, forced labor, domestic servitude, organ or tissue extraction, and sexual slavery or commercial exploitation. In the world, human trafficking ranks third in terms of organized crime, behind drug trafficking and the arms trade. The primary purpose of human trafficking, which targets women and children, is sexual exploitation. Individuals who are victims of human trafficking have their human rights violated and risk becoming new victims. To prevent human trafficking, the laws prohibiting it must be strengthened to the fullest extent possible. People living below the national poverty line must be educated about the dangers of human trafficking to shield them from becoming victims.

Human trafficking has several intricately linked causes. The issue is exacerbated by poverty, illiteracy, gender discrimination, and a dearth of law enforcement. Because they are discriminated against and frequently seen as a burden on the family, women and girls are especially susceptible to human trafficking. Their susceptibility is further increased by a dearth of economic and educational options. The sex trade and the need for inexpensive labor are further factors that contribute to the issue of human trafficking. In addition to the widespread willingness of companies and individuals to take advantage of weaker individuals for their gain, another factor contributing to the issue is the lax enforcement of labor regulations.

The effects of human trafficking are catastrophic for victims, families, and society at large. Human trafficking victims experience emotional and physical abuse, as well as violations of their fundamental human rights. They are made to work in cruel conditions and are robbed of their freedom and dignity. Because it results in the loss of productive labor and lowers the GDP of the nation, human trafficking also has a detrimental effect on the economy. Given that many victims of human trafficking are coerced into the sex trade, it also aids in the spread of illnesses.

Numerous scholarly investigations have underscored the significance of poverty and the dearth of economic prospects as pivotal elements that underlie human trafficking in India. For example, an International Labor Organization (ILO) study discovered that the main causes of human trafficking for forced labor in India were poverty and illiteracy[6] (ILO, 2017). UNDP (2011) conducted a study that emphasized the susceptibility of women and children to human trafficking as a result of poverty and limited access to healthcare and education.

Several studies have also brought attention to the effects that human trafficking has on its victims' relatives. Human trafficking victims experience emotional and physical abuse, as well as violations of their fundamental human rights. They are made to work in cruel conditions and are robbed of their freedom and dignity. They are deprived of their freedom and dignity and are forced to work in inhumane conditions. According to research

[4] Ecker, E. (2022, September 5). Breaking down Global estimates of human trafficking: Human Trafficking Awareness Month 2022 - Human Trafficking Institute. Human Trafficking Institut Available at https://traffickinginstitute.org/breaking-down-global-estimates-of-human-trafficking-human-trafficking-awareness-month-2022/

[5] International Labour Organization (2017). Global estimates of modern slavery: Forced labour and forced marriage.Available athttps://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/publication/wcms_575479.pdf

[6] International Labour Organization. (2017). Global estimates of modern slavery: Forced labour and forced marriage. https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/documents/publication/wcms_575479.pdf

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conducted by the United Nations Office on Drugs and Crime (UNODC), victims of human trafficking in India frequently experience physical injuries, mental health issues, and STDs, among other health issues[7].

Nations have been fighting human trafficking for several decades, but the complexity of the situation means that the problem still exists. Numerous research studies have emphasized the necessity of a multi-sectoral strategy to combat human trafficking, encompassing the reinforcement of the legal framework, raising public awareness, and offering assistance to victims. The significance of community-based approaches to combating human trafficking—which entail collaborating with communities to increase awareness and prevent trafficking—was underscored by research conducted by the United Nations Children's Fund.

The discourse surrounding trafficking still places a premium on state security over human security and fails to sufficiently address the underlying causes of trafficking as well as the insecurity of those who are trafficked. This is due to the focus on trafficking as a problem of prostitution or illegal migration.[8]

According to Nazar [9](2014), the World Bank, World Trade Organization, and International Monetary Fund, among other organizations, have brought about new international policies that have led to an increase in the relocation of rural populations, lower salaries, and extreme poverty. These policies have also been seen as a backdrop of the emerging phenomenon of globalization, the feminization of international migration, and state policies to sustain in the current competitive economic scenario.[10]

Armed conflict erodes protections for the most vulnerable members of society, weakens the rule of law, reduces economic opportunities, destroys or deteriorates vital social services, forces people to flee their homes, and puts them in awkward situations—all of which make them more vulnerable to human traffickers. All things considered, conflict contributes significantly to the vulnerability of victims of human trafficking and, eventually, exploitation by dehumanizing large segments of society and creating an environment in which the value of the individual human being is increasingly undervalued Furthermore, efforts to settle disputes and improve security are closely linked to the problem of people trafficking. It is now beyond question that "trafficking is a substantial source of revenue for criminal organizations whose activities may destabilize legitimate governments and undermine the mission of the military," to name just one example. The crime can undermine military operations and turn into a security concerns [11].

Consistently affecting women and children, sex trafficking entails coerced engagement in commercial sex acts. Any youngster under the age of eighteen who has participated in a commercial sex act is regarded as a victim of human trafficking in the United States. Eighty percent of those involved in international trafficking are women and girls. Every year, 1 million children are exploited by traffickers in the commercial sex trade. Human trafficking is commonly associated with the forced prostitution of women. This is but one facet of the trafficking of people. Men and children are also survivors of human trafficking, and these survivors are taken advantage of in a variety of ways. Among other things, victims may be coerced into any of the following kinds of labor: The following industries include prostitution, hair and nail salons, manufacturing, agricultural work, janitorial services, hotel services, construction, domestic slavery, and strip club dancing.

Human trafficking is one of the transnational criminal organizations' allegedly fastest-growing operations. International conventions denounce human trafficking as a violation of human rights. Furthermore, a European

[7] United Nations Office on Drugs and Crime.(2012). Global report on trafficking in persons. Vienna, Austria: UNODC. https://www.unodc.org/documents/data-and-analysis/glotip/Trafficking_in_Persons_2012_web.pdf

[8] Vidushy, V. (2016b). Human trafficking In India: An analysis. In All Research Journal, International Journal of Applied Research (Vols. 2–6, pp. 168–171).https://www.shram.org/uploadFiles/20180319102934.pdf

[9] Najar, J. L. (2014b). Human trafficking in India.ResearchGate.https://www.researchgate.net/publication/303276513_Human_Trafficking_in_India/link/573ac71708ae9ace840ddf55/download?_tp=eyJjb250ZXh0Ijp7InBhZ2UiOiJwdWJsaWNhdGlvbiIsInByZXZpb3VzUGFnZSI6bnVsbH19

[10] *ibid*

[11] Fenton, T., Hesketh, G., Maio, G., Muraszkiewicz, J., & Watson, H. (2020). Toward a Better Understanding of Human Security Risks: Developing a Risk Assessment Methodology for Human Trafficking at the onset, during and after conflict. Journal of Human Trafficking, 7(3), 268–290. https://doi.org/10.1080/23322705.2020.1743072

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Union directive addresses people trafficking[12]. This article proceeds in four sections. The first section focuses on the problem of human trafficking in conflict within the wider human security paradigm. It also reflects upon approaches to risk assessment within humanitarian, law enforcement, and military sectors. The second section discusses the methods used in this study to develop a proof-of-concept risk assessment methodology for human trafficking in conflict, noting the importance of adopting a co-design approach to research and development. Section three then explores the results of the study, including an emphasis on developing a threat-and-vulnerability assessment approach to risk assessment. The article concludes by highlighting the study's intersections with wider considerations around human security and suggesting some areas for future research and policy development.

This research paper is divided into four sections. The first section throws light on the seriousness of human trafficking, e.g. total number of victims detected over ten years, agewise and genderwise composition of human trafficking victims, and drivers (purposes) of human trafficking. The second section covers various factors of human trafficking which include economic, social, political, and cultural factors. The third section discusses the impact of human trafficking on victims, society, nations, etc. The fourth section discusses prospects, and measures to combat human trafficking.

Figure 1: Total Number of Human Trafficking Victims (Worldwide)

Source: *Statista (2024)*

Figure 1 depicts the status of the total number of human trafficking victims who have been detected. In 2008, this number was 30,961, whereas in 2022, it reached 115,324. This was approx. 4 times more in the year 2022 than in 2008. From 2008 it increased gradually upto 2014. But numbers started jumping in 2015. It was maximum in 2019, having 118,932, in those 15 years, started decreasing with each passing year, but again rose to 115,324 in 2022.

[12] Shelley, L. (2006). Human Trafficking: a Global perspective. Cambridge University Press.https://assets.cambridge.org/97805211/13816/excerpt/9780521113816_excerpt.pdf

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Table 1: Total number of human trafficking victims (Worldwide)

Year	Human trafficking victims (%)
2009	58.60
2010	-32.57
2011	27.72
2012	10.12
2013	-3.89
2014	-0.66
2015	75.03
2016	-12.04
2017	41.64
2018	-11.70
2019	38.92
2020	-8.17
2021	-17.27
2022	27.64

Source: *Author's calculation*

Table 1 shows the percentage change in the number of human trafficking victims detected across various nations. This table gives a picture of the seriousness of the trafficking situation across various nations, as it is based on world-level data. To begin with, in 2009, the rise was 58.60 percent, which dipped by 32.57 percent in 2010. The jump was high in 2015, by 75.03 percent, while the lowest increase was in 2012 by 10.12 percent. The highest dip was in 2010 by 32.57 percent whereas the lowest dip was by 0.66 percent in 2014.

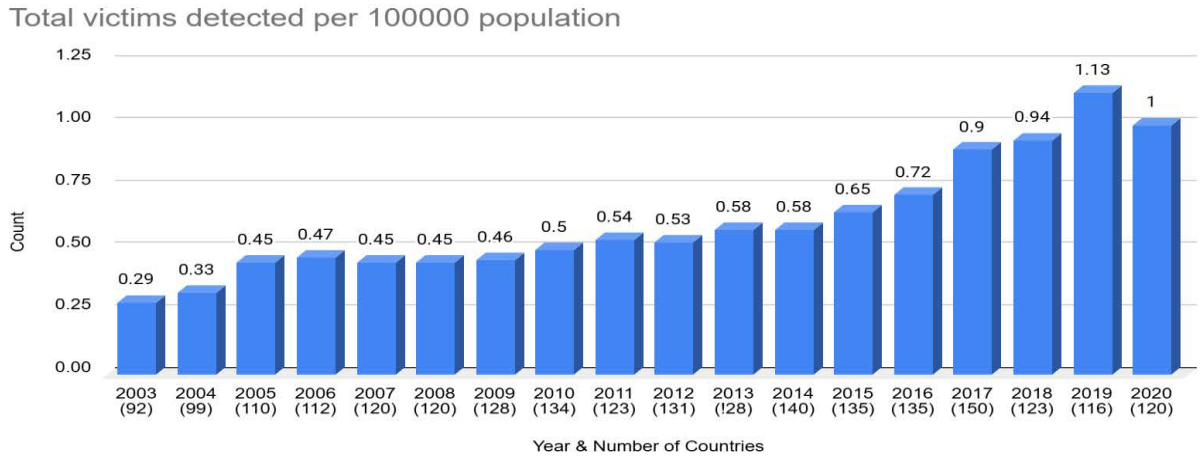

Figure 2: Total Number of Victims Detected Per 100000 Population

Source: *United Nations Office on Drugs and Crimes report, 2022*

Figure 2 shows the total number of victims detected per 100,000 population covering a period from 2003 to 2020. This figure also shows the number of countries along with the year and number of human trafficking

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victims. The increase was gradual from 2003 to 2014. It started rising at a greater rate from 2015 onwards. In 2003, the number of victims detected was .29 victims per 100000 population. It became highest in 2019 with 1.13 victims per 100,000 population. Then again it dipped in 2020.

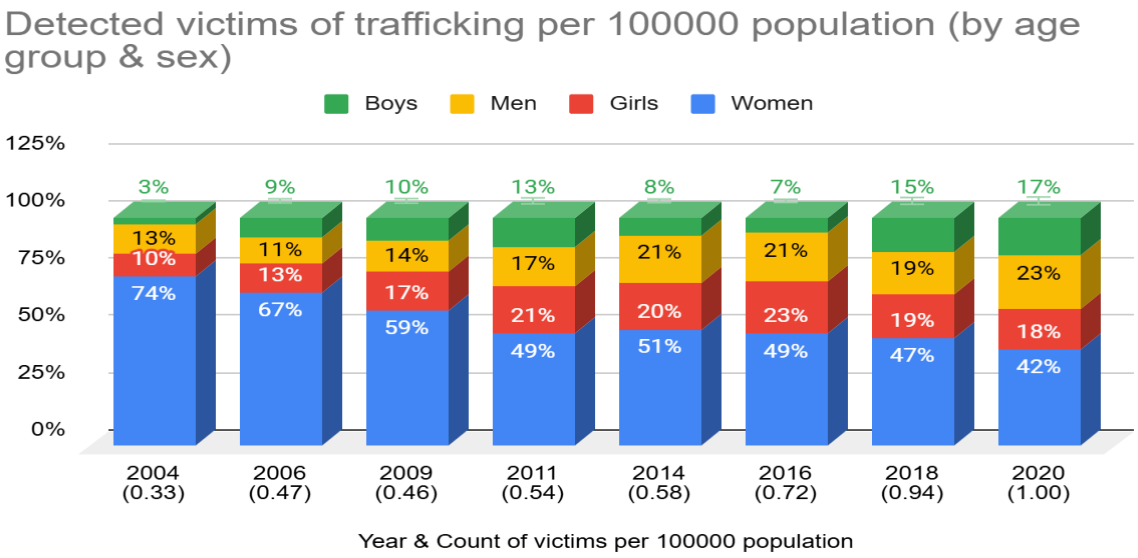

Figure 3: Detected Victims of Trafficking- By Age Group And Sex

Source: *United Nations Office on Drugs and Crimes report, 2022*

Figure 3 gives a detailed picture of the human trafficking situation across the world. This figure shows the composition of male females, women, girls, boys, and men. The figure clearly shows that the percentage of women being trafficked has fallen while there has been a percentage increase in the number of girls, boys, and men being trafficked. In 2004, the trafficking percentage of women was 74 percent, 10 percent for girls, 13 percent for men, and 3 percent for boys. The dynamics changed by the year 2020. The percentage of women being trafficked fell by 42 percent but the situation of boys, girls, and men trafficking became worse. It reached upto 17 percent for boys, 23 percent for men, and 18 percent for girls. If male-female composition is taken into consideration, it was 84 percent female and 16 percent of male in 2004 which became 60 percent female and 40 percent of male in 2020.

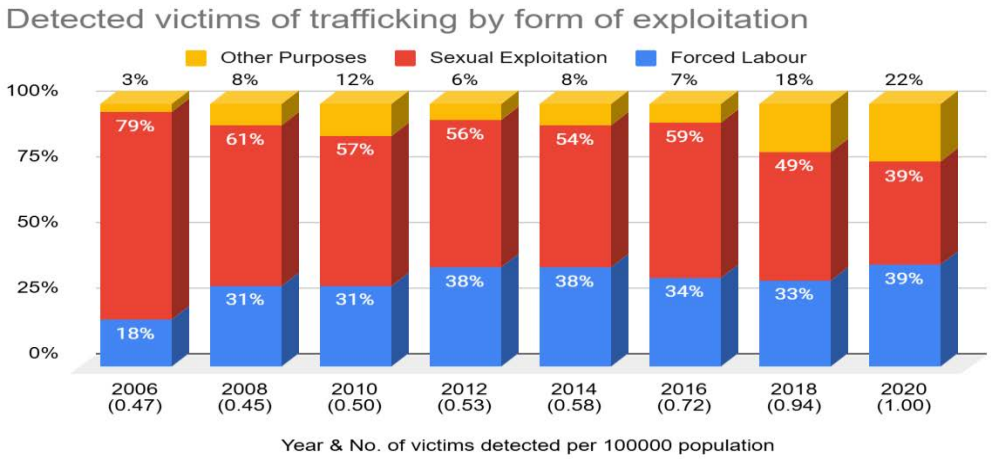

Figure 4: Detected victims of trafficking by form of exploitation

Source: *United Nations Office on Drugs and Crimes report, 2022*

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Figure 4 shows the composition of reasons for human trafficking among detected victims. It can be seen that a major portion stands for sexual exploitation followed by forced labour and other reasons. In 2006, sexual exploitation constituted 79 percent which kept dropping with some fluctuation and fell upto 39 percent in 2020. The portion of forced labour rose from 18 percent in 2006 to 39 percent in 2020. Other reasons constitute yet a small stake but kept increasing from 3 percent to 22 percent upto the year 2020.

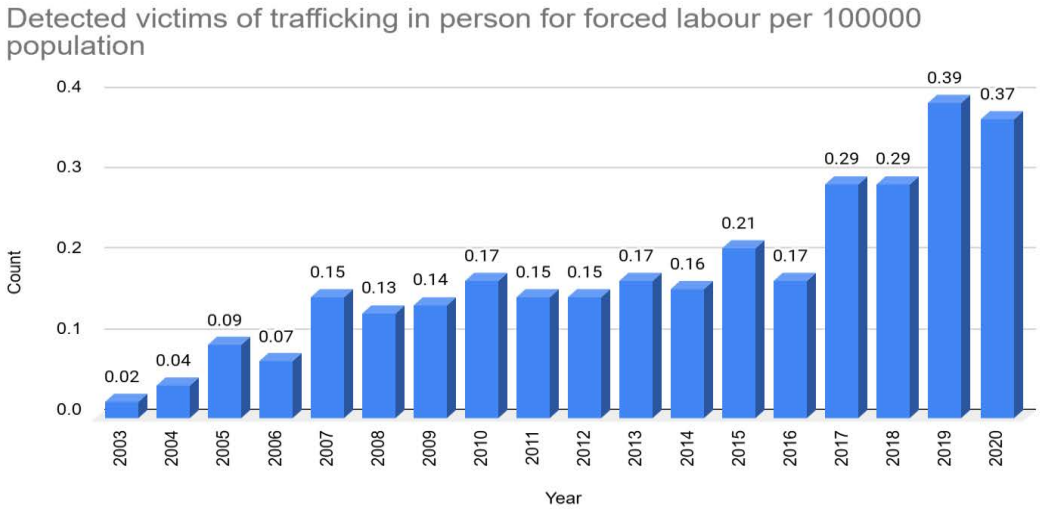

Figure 5: Detected Victims of Trafficking for Forced Labour

Source: *United Nations Office on Drugs and Crimes report, 2022*

Figure 5 shows the detected victims of trafficking for forced labour per 100,000 population. This figure enforces the strength of this reason as shown in figure 4. In 2003, the number of trafficking victims detected for forced labour purposes was 0.02 per 100000 population which kept increasing gradually with some ups and downs upto 2016. In 2017 it jumped to 0.29 victims per 100000 population and hit upto 0.37 victims per 100,000 population by year 2020. There has been a major lift in the number of trafficking victims from 2003 to 2020. It was 0.02 in 2003 which rose to 0.37 in 2020.

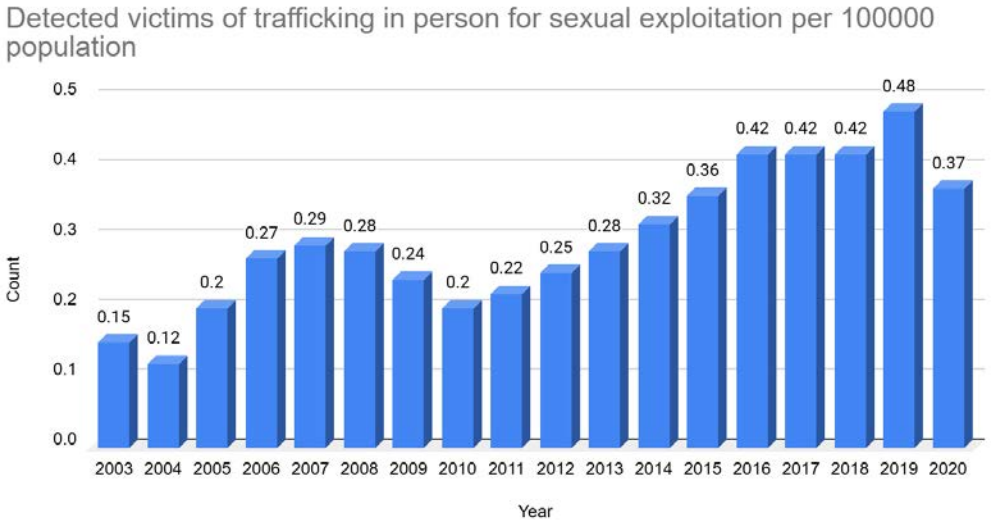

Figure 6: Detected victims of trafficking for sexual exploitation

Source: *United Nations Office on Drugs and Crimes report, 2022*[13]

13 Global Report on Trafficking in Persons. (2022). United Nations: Office on Drugs and Crime. Available athttps://www.unodc.org/documents/data-and-analysis/glotip/2022/GLOTiP_2022_web.pdf

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Figure 6 shows the detected victims of trafficking for sexual exploitation. This figure provides a great insight and can be considered an extension of figure 4. There has been a fluctuation in the number of detected victims of human trafficking for sexual exploitation. But it can be seen that certainly, this number has increased. It was 0.15 victims per 100,000 population in 2003 and rose to 0.37 victims per 100,000 population in 2020. It was lowest in 2004 with 0.12 victims and highest with 0.48 victims.

FACTORS OF HUMAN TRAFFICKING

A combination of political, social, cultural, and economic reasons fuel human trafficking. Due to economic hardship and a lack of good jobs, people and families become easy targets for human traffickers who take advantage of their desperate need for security in their finances. Women and children are socially marginalized due to gender discrimination and deeply ingrained cultural norms, which makes them easy prey for forced labor and sexual exploitation. Populations are uprooted by political unrest and violence, which fosters conditions that allow human traffickers to operate mostly unchecked. The situation is made worse by weak legal frameworks, corruption, and lax enforcement, which allow trafficking to continue with impunity. Furthermore, many people and communities lack the knowledge and understanding necessary to identify and counteract the deceptive tactics used by traffickers.

Human trafficking can be caused by the following broad reasons:

1. **Economic factors-** Economic factors can be further defragmented into:
    a. **Poverty**: poor people are more vulnerable to the risk of being trafficked, maybe because of financial desperation.
    b. Lack of **economic opportunities:** Limited access to employment and economic resources forces individuals to seek work in risky and unregulated sectors. ,
    c. Prevalence of **debt** in the family- Debt bondage, is also a major issue and a great cause of trafficking, where individuals pledge themselves against a loan or debt.
2. **Social and cultural factors**- Social and cultural factors can be further defragmented into:
    a. **Gender discrimination-** In many parts of the world, women and girls face systemic gender inequality, making them more susceptible to trafficking, particularly for sexual exploitation.
    b. **Cultural norms-** Practices such as child marriage and the marginalization of certain communities can contribute to trafficking.
    c. **Conflict-** Social, and cultural conflict, internal disturbance, riots, etc can also be reasons for human trafficking.
    d. Lack of awareness and education- Practices such as child marriage and the marginalization of certain communities can contribute to trafficking.
3. **Legal and political factors**- Legal and political factors can be further defragmented into:
    a. Weak legal framework- Countries with inadequate or poorly enforced laws provide little deterrence against traffickers.
    b. **Corruption-** Countries with inadequate or poorly enforced laws provide little deterrence against traffickers.
    c. **Conflict and political instability-** Wars, civil unrest, and political instability displaced populations, creating environments where traffickers can operate with impunity.

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IMPACT OF HUMAN TRAFFICKING

Human trafficking has a devastating impact on individuals, families, and society as a whole. Victims of human trafficking often suffer physical and emotional abuse, and their basic human rights are violated. They are deprived of their freedom and dignity and are forced to work in inhumane conditions.

Human trafficking also harms the economy. It leads to the loss of productive labor and hurts the country's GDP. It also contributes to the spread of diseases, as many victims of human trafficking are forced into the sex trade.

The impact of human trafficking can be seen in three broad categories:

1. **On victims-** It can be further defragmented into:
    a. **Physical Health:** Victims often suffer from serious physical injuries, malnutrition, and sexually transmitted infections.
    b. **Mental Health:** The psychological toll includes severe trauma, depression, anxiety, and PTSD.
    c. **Human Rights Violations:** Victims experience a range of human rights abuses, including loss of freedom, forced labor, and violence.
2. **On families and communities-** It can be further defragmented into:
    a. **Family Disintegration:** The removal or exploitation of a family member can cause significant emotional and economic strain on families.
    b. **Social Stigma:** Trafficking survivors often face social stigma, making reintegration difficult.
    c. **Community Cohesion:** High levels of trafficking can undermine trust and cohesion within communities, creating environments of fear and mistrust.
3. **On societies and nations-** It can be further defragmented into:
    a. **Economic Impact:** Human trafficking disrupts labor markets, depresses wages and can deter foreign investment.
    b. **Public Health:** Trafficking contributes to the spread of diseases and places additional burdens on public health systems.
    c. **Legal and Security Concerns:** Trafficking networks often intersect with other forms of organized crime, such as drug trafficking and terrorism, posing significant law enforcement challenges.

PROSPECTS FOR COMBATING HUMAN TRAFFICKING

A global strategy that is coordinated and multifaceted is needed to combat human trafficking. Ensuring strong enforcement and enacting comprehensive anti-trafficking laws that conform to international norms are crucial steps toward strengthening legal frameworks. To preserve survivors' rights and well-being, victim protection laws must be put in place. These laws must provide safe harbor provisions and access to legal aid. In addition to fostering international collaboration that aids in the disruption of cross-border trafficking networks, specific training provided to law enforcement personnel improves their ability to identify and address incidents of human trafficking. Education initiatives give vulnerable groups the information and skills to lessen their vulnerability to human trafficking, while focused efforts raise public awareness about the dangers and symptoms of the practice in communities.

By reducing poverty and financial desperation, economic empowerment programs like job creation and social safety nets address the underlying causes of human trafficking. For survivors to receive the necessary medical

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attention, psychological assistance, and vocational training for their recovery and reintegration into society, comprehensive support services are crucial. Last but not least, developing international collaborations between NGOs, governments, and international organizations strengthens our ability to fight human trafficking as a group, and advancing data gathering and research yields vital information for developing policy and intervention plans. Great progress may be made in ending human trafficking and lessening its terrible effects with these coordinated initiatives.

CONCLUSION

A coordinated international response is necessary to address the complicated issue of human trafficking. It is critical to address underlying issues such as poverty, lack of education, and gender discrimination. Initiatives for economic empowerment, such as microfinance, social safety nets, and job development, help lessen the financial desperation that human traffickers take advantage of. Increasing educational opportunities gives people the tools they need to fend off human trafficking, especially young women and members of underrepresented groups.

Adopting comprehensive anti-trafficking laws that criminalize human trafficking in all its forms, punish traffickers harshly, and provide victim protection measures like legal aid and immunity from prosecution for crimes committed as a result of trafficking are all necessary to strengthen legal frameworks. To destroy trafficking networks, it is also essential to support international cooperation and improve law enforcement capacities through specialized training.

To support survivors' rehabilitation and reintegration, strong support networks that offer medical attention, psychiatric counseling, and job training are essential. Campaigns for public awareness inform communities about the dangers and warning signs of human trafficking, encouraging standards that shield victims and lower the demand for services that exploit them. Education programs designed for vulnerable populations enlighten participants on the strategies used by traffickers as well as their legal rights, which further reduces susceptibility.

To strengthen anti-trafficking efforts, governments, NGOs, and the commercial sector must collaborate internationally. Data analytics and cross-border information exchange are examples of technological innovations that can assist in identifying and dismantling trafficking networks. Steady work and international cooperation are essential to drastically lowering human trafficking.

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EMERGENCE OF DEEP FAKES AND GENERATIVE ARTIFICIAL INTELLIGENCE: A TECHNO-LEGAL ANALYSIS IN INDIA

Praveen Kumar*

Abstract

The days of human interaction in the 'real' world are long gone. According to a study, 502.2 million Indians, or about 77% of the population, use cell phones. India has over 196 million active social network members. Thus, when an act is carried out on Social media intended to hurt society, whether it is fake news or information related to someone's personal life, it can spread like wildfire. Approximately 95% of what the share or view is from unknown sources and thus unconfirmed. The increasing application of Generative Artificial Intelligence (AI) in the twenty-first century is driving a shift in society and economy toward more automation, data-driven decision-making, and the incorporation of AI systems into a wide range of industries and economic sectors, affecting the labour market, healthcare, government, business, education, propaganda, and disinformation. The author intends to inquire more about the question of Generative Artificial Intelligence that is it a bane or a boon? On one hand, the primary aim and objective of a legal system is to regulate the advantages of the technology and on the other hand to safeguard the economic, social and political interests of general public. The concept of Deep Fakes and Generative Artificial Intelligence have received a significant attention in almost developing society across the globe for its advantages and similarly every legal system is trying to overcome increasing instances its abuse. The researcher intends to examine the techno-legal aspects of the upcoming developments in Generative Artificial Intelligence and emergence of Deep Fakes across the globe. The researcher also aims to analyse the judicial trends in India while adjudicating the matters pertaining to Deep Fakes with reference to recent decided judgements.

Keywords: Deep Fakes, Generative Artificial Intelligence, Cyber Crimes, Frauds, Defamation

INTRODUCTION

The concept of Deep Fakes and Generative Artificial Intelligence have received a significant attention in almost developing society across the globe for its advantages and similarly every legal system is trying to overcome increasing instances its abuse. This unverified news may easily control and corrupt large groups of people.[1]The increasing application of Generative Artificial Intelligence (AI) in the twenty-first century is driving a shift in society and economy toward more automation, data-driven decision-making, and the incorporation of AI systems into a wide range of industries and economic sectors, affecting the labour market, healthcare, government, business, education, propaganda, and disinformation. The author intends to inquire more about the question of Generative Artificial Intelligence that is it a bane or a boon? On one hand, the primary aim and objective of a legal system is to regulate the advantages of the technology and on the other hand to safeguard the economic, social and political interests of general public.

Generative Artificial Intelligence can be used to enhance teaching-learning process by allowing academicians to adapt their teaching to students' needs using AI-powered educational tools. However, the findings also highlight that AI can be misused to overcome moral constraints. Overall, Generative AI has the potential to be an effective research tool, provided the same shall be used with utmost care and caution.Deep fakes are a kind of Generative AI technology that creates synthetic media like photos, videos, and audios using machine learning algorithms, especially Generative Adversarial Networks (GANs). Deep fakes technology aims to produce extremely lifelike synthetic media that mimics actual people, although with some content manipulation. Two methodologies, Generative Adversarial Networks and Deep Learning, are the foundation of Deep Fakes technology. Deep Learning is defined as:

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[1] Jour, TengkuMahamad, Tengku Elena, Ambran, Nur, Azman, Nur, Luna, Daina, "Insights into social media users' motives for sharing unverified news",SEARCH Journal of Media and Communication Research 13 (3), 1-18

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"A branch of machine learning that processes and analyses vast volumes of data using Artificial Neural Networks—algorithms that are inspired by the composition and operations of the brain".

Numerous fields, including computer vision, robotics, speech recognition, and natural language processing, have benefited from the use of Deep Learning. A type of Deep Learning architecture known as Generative Adversarial Networks (GANs) trains on a dataset to produce new, synthetic data that is similar to the original data using two Neural Networks, a Discriminator and a Generator. While the Discriminator evaluates the veracity of the created samples and the actual samples from the training dataset, the Generator produces fictitious samples[2].

DEEP FAKE AND GENERATIVE ARTIFICIAL INTELLIGENCE TECHNOLOGY

Generative Artificial Intelligence is a regenerative phenomenon of Science & Technology in itself, which leads to the birth of other several innovation technologies such as Deep Fake, Chat-GPT and many more. Generative AI technology is the beginning of a new technological era which needs an effective understanding by the public and law enforcement agencies too.

Generative Artificial Intelligence (AI) refers to:

"The intelligence displayed by machines, especially computer systems. This area of computer science study focuses on creating and analysing tools and software that allow machines to sense their surroundings and use intelligence and learning to make decisions that will increase their chances of accomplishing specific objectives. These devices could be referred to as AIs".

In order to address the fact that the content is phony, the terms *"Deep fake"* and *"Fake"* are combined. Deep is derived from AI Deep-Learning technology, which is a kind of machine learning that comprises many levels of processing. When a Reddit administrator started a subreddit named *"Deep-fakes"* in 2017 and started uploading videos that employed face swapping technology to include celebrities' likenesses into already-existing pornographic videos, the term *"Synthetic Media"* first appeared.

A new phenomenon known as *"Deep-fakes"* has surfaced as a result of the development of AI-based tools (like DALLE-3 and Sora) that can produce images and videos at scale. Deep Fakes are defined as:

"Deep-fakes are images or recordings that have been expertly altered and manipulated to falsely portray someone as saying or doing something that they have not actually said or done".

Deep-fakes have opened up new creative possibilities, particularly in marketing and entertainment, but they may also be abused for negative outcomes like fraud, slander, and fraudulent advertising. There are certain obstacles for the current legal frameworks, such as privacy and consumer law, in addressing these threats.[3]Deep Fake term has been evolved from the concept of Deep Learning and Fake multimedia files. In other words, Deep Fake is the end product of application of Deep Learning to produce fake multimedia files such as images or videos by using Advanced Generative Modelling techniques such as Face2Face technique. This technique is used for re-enacting facial expressions from a facial image by using computer vision and forming a *"Avatar"*. Researchers from University College of Berkeley had already introduced a similar technology to alter the appearance of images and videos in 2018. A different team of researchers from the University of Washington put up a plan to sync a video's lip movement to a speech from an external source. Ultimately, the term *"Deep fakes"* first surfaced in November 2017 to refer to the dissemination of pornographic movies in which the faces of celebrities were replaced with the originals.

In addition to these researchers have also developed several algorithms to build Deep-Fakes of an original audio, video clippings where people will listen to the actual voice of the speakers with an edited script. With such technology, researchers of Deep Fakes have produced motion pictures/videos from an original video with a

[2]BeddhuMurali, "Deep Fake Detection: A Systematic Literature Review",*IEEE Access* (Feb 2022)
[3]Antonenko V., "Regulating Deep Fakes: Legal and Ethical Considerations",*Journal of Intellectual Property Law & Practice* (January 2020) Vol. 15, Issue 1, 24

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different content, expressions & movements. These Deep Fakes are so identical and similar to the identity of a person that it has become nearly impossible to check the Deep Fakes and Original files.[4]

Generative AI technology has been developed to mimic any individuals voice and images consistent with the original expressions. Deep Fakes videos are frequently created by overdubbing real. It is quite evident that the media sector will face a significant loss of customer trust due to deep fakes. Deep Fakes have become an easy tool to produce fake news which can bring a threat to the public peace & security by hiking an emergent panic in the society. Deep Fakes may result in to a complete chaotic situation which may result in to an actual threat to the National security in any Country of around the globe. Menace of Deep Fakes have just begun and the global society is getting effected in its day to day life.

INSTANCES OF ABUSE OF GENERATIVE AI TECHNOLOGY& DEEP FAKES

Deep Fake technology creates substantial issues in legal proceedings, notably in criminal cases, with possible consequences for people's personal and professional lives. In most legal systems, the lack of means to authenticate evidence places the burden on the defendant or opposing party to contest manipulation, possibly becomes a widespread problem. To counter this, a suggested rule might require evidence authentication before court admission, possibly through bodies such as the Directorate of Forensic Science Services, albeit this would incur economic costs. Notable instances of abuse of technology are as follows:

a) Pornography: Deep fakes are most commonly used to create nonconsensual pornographic content. Female celebrities' or ordinary women's faces aretransferred onto porn stars' bodies without their knowledge or consent. This is a violation of privacy and harms one's reputation. For instance, an accused was imprisoned in 2019 for creating deep fakes pornography of his lover in India.[5]

b) Politics: Deep fakes can disseminate misinformation and propaganda during elections. During the Delhi elections in India, a leader's actual footage was edited to depict him as disparaging his opponents. Such forgeries can destabilize campaigns and harm candidates in elections. If left uncontrolled, political deep fakes could jeopardize elections in any democratic Country.[6]

c) Defamation: This includes several deep fakes videos of important persons of a society including leaders, politicians, judges, celebrities etc. Their facial expressions are modulated to depict a funny or satirical content which is sufficient to defame the person in society. Consequently, several people will be left outrageous and their public image will be destroyed as a result the society will be at peril of destruction because of the abuse of technology.[7]

d) Fraud: Furthermore, it's easy to commit a fraud by using Generative AI technology to clone anyone's voice which will be sufficient to impersonate the key individuals of any organization such as CEOs or other officials to obtain critical information. For instance, this technique had already cost €200,000 to a leading energy company in UK in 2019. Deep fakes can potentially influence stock prices by displaying fraudulentbusiness announcements. Financial frauds can disrupt markets and entities within a spur of moment.[8]

e) Punishment: It is almost impossible to establish that a manipulated image or a Deep Fake video content is an actual statement of fact or a false statement. The defendant may argue that there are evidence that the image is phony, such as context, that a reasonable person would not interpret it as a statement of reality.[9] This is sufficient to stall the judicial process and to evade from punishment in any judicial system.

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[4] Ibid.
[5]McGlynn, Clare; Rackley, Erika; Houghton, Ruth, "Beyond Revenge Porn: Image-Based Sexual Abuse and the Continuum of Harms", *Feminist Legal Studies*, 25(1), 25-46 (2017)
[6]Tyagi, Parth and Bhatnagar, Achyutam, "Deep fakes and the Indian legal landscape", *Inforrm Blog* (July 3, 2020)
[7] Paris, Britt and Donovan, Joan, "Deep fakes and Cheap Fakes: The Manipulation of Audio and Visual Evidence", *Data and Society Research Institute* (2019).
[8]Stupp, Catherine, Fraudsters,"Used AI to Mimic CEO's Voice in Unusual Cybercrime Case", *The Wall Street Journal* (Aug 30, 2019)
[9]Guy Alon, Azmihaider, Hagithelor,"Judicial errors: Fake imaging and the Modern Law of Evidence", *UIC Review of Intellectual Property Law*(2022) 82

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Figure 1: Problems Faced Due to Deep Fake Across the Globe

The problem of Deep Fake is on the rise across the globe. Countries like China, Indonesia, Turkey, Brazil etc. are at the peril of a complete state of confusion due to this technology. Several other countries which are under developed are at the level of extreme risk in terms of social, economic and political security. Elections in many countries can be easily rigged, Stock market can be easily manipulated by such technology. The author finds an alarming threat to many states in protecting their internal & external security as well.

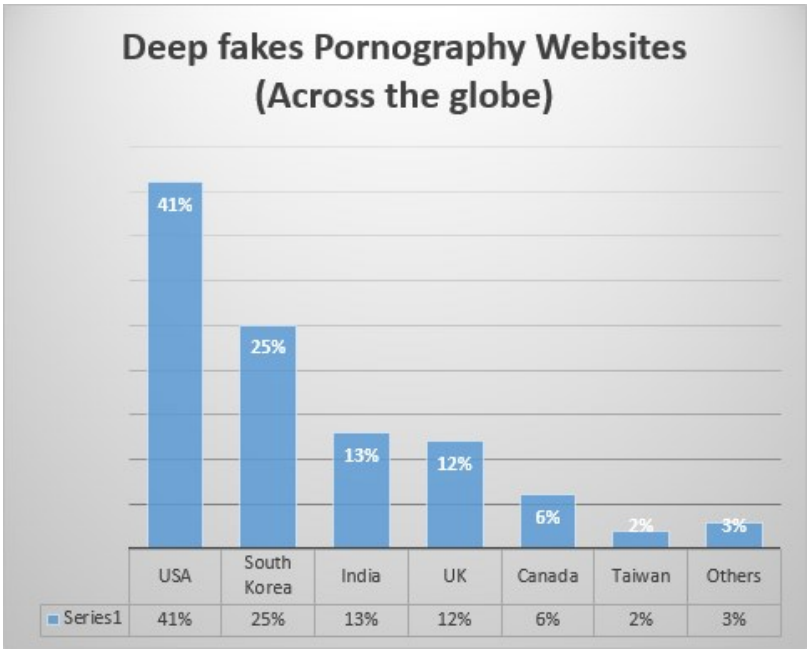

Figure 2: Deep fakes Pornography Websites Across the Globe[10]

[10]Yazidi Anis,"Deep Fake Statistics – Current & Future Trends", *Artificial Intelligence Review*, (57) 3

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In reference to the above Chart, United States of America is on the first position in producing Pornographic websitesbased on Deep Fakes, followed by South Korea and India. Global situation is alarming and several people are being victimised on account of abuse of technological developments. This indicates that there is a dire need to establish a robust mechanism to protect the rights of the citizens across the globe.

DEEP FAKES & RECENT JUDICIAL TRENDS IN INDIA

A survey by a cyber-security company McAfee has revealed that over 75% of Indians have seen some form of deep fake content every year, with at least 38% having encountered with a deep fake scam. Indian population is moving towards use of Smart Phones, Internet, Computers and Social Media at a very high pace since last two decades. People of all age groups have started working on Internet more often in order to ripe the benefits of the advanced technology by average 06 hours daily (estimated by a report). But due to lack of training and awareness about the challenges, several people circulate the deep fake contents to all of their groups unknowingly, without verifying the source and authenticity. For Instance, In India, the discussion around Deep Fakes gained momentum after a viral clip of actor Rashmika Mandanna went viral in 2023. Eventually, Prime Minister Narendra Modi also warned about the potential harms of technology misuse. Consequently, Central Government has also issued advisories to all the concerned news networks to circulate the credible information only after verification of the facts.

In another incident, Actor Ranveer Singh has filed a complaint over a deep fakes video that allegedly showed him endorsing a political party. The video, which was generated using an AI-enabled tool. He was in an interview with the news agency ANI. In the alleged deep fake, he was seen criticizing the present Govt. about several socio-economic issues in India concluding with a message to the Indian population to elect the Opposition Party in the parliamentary election scheduled in May 2024. Singh's team has registered a First Information Report (FIR) against the handle that promoted the AI-generated video. Aamir Khan, an Indian actor, has never endorsed any political party and has focused on raising awareness through Election Commission public awareness campaigns for past elections.[11]

In another incident, a 76-year-old man in India received a video call. He saw the face of a retired senior police office of UP Police and heard his voice. The police officer was seen asking money from the old man. Consequently, he made payments as per the directions received on his Deep Fake video call, due to fear of the Police atrocities. As a result, the criminals who sent this deep fake, received the money. After knowing the fact that it was a doctored video created by Deep Fake Technology, he approached the Police and an FIR has been registered and a dedicated team was formed to crack the case.

In another incident, Mr. Arvind Sharma, a resident of Govind Puram, was contacted by the Fraudsters through a Facebook video call. He saw a nude pic during the call and disconnected the call. Later, he received a video call on WhatsApp from a police officer, threatening him to pay the money else his pic will be made viral on social media. However, instead of paying money, he preferred to file a complaint.[12]

Moreover, the Indian Parliamentary election in 2024 was a significant concern due to the potential risks for spreading misinformation online, where a political party already known for violent rhetoric against a specific community, having a stronghold in the country. Whereas, the use of AI-powered video and audio manipulation tools have made it harder to classify certain cases of misinformation. In such situation, dead politicians may be resurrected and famous actors have been pulled into bogus endorsements and the actual malice will be less evident. Such instances of speech which may offend a particular community result in to hateful reaction, leading to riots or internal disturbance in a Country. Generative AI Tools are being used to accelerate the speed of percolation of wrong information in the society within a spur of moment. However, it's the hate speech, which is the primary cause of concern and AI tools are merely adding the fuel to the fire. Another classical example of AI Tools is a Face-Swap video where someone can replace the face of the original speaker and manipulate the words to deceive the audience resulting in to a chaotic situation in the society.[13]For instance, a Deep Fake video

[11]Editor, *The Indian Express* (Apr 22, 2024)
[12]Editor, *The Economic Times*(Nov 30, 2023)
[13]Brandom Russel, "India's election wasn't the deepfake doomsday many feared", *Rest of World*(May 30, 2024)

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of Union Home Minister portraying the deceitful statements to abrogate rights of reserved category, made viral and consequently the Maharashtra Youth Congress and 16 others were booked by Mumbai Policeunder various sections of IPC, 1860 and IT Act 2000 for allegedly creating and sharing thatDeep Fake video.[14]

In another instance of abuse of technology where Journalist Rana Ayyub was targeted by far-right trolls after being morphed into a pornographic clip. This time, Deep Fake technique was used to create fake celebrity pornographic video or revenge porn. Ayyub's face was morphed into the porn actor's images, and the clip was circulated as if she had done the act. She had protested to secure justice to a rape victim in the past. Whereas opposition party leaders were working to save the accused from the judicial grip. They were held responsible for creating deep fake video of the journalist to defame her in the public. Journalist was shocked to see her face in the porn video, which she could tell was not her. She was harassed and had over 100 Twitter notifications sharing the video.[15]

INSTANCES OF ABUSE OF DEEP FAKE TECHNOLOGY IN UNITED STATES

Facebook user Mr. Schrems filed a complaint with the Irish data protection authority, claiming that users Date from European Union had transferred illegally to the firms of United States of America. He alleged that this data transfer is a violation of Data Protection Act of European Union and violation of right to privacy of the users from European Union. Whereas authority of Ireland rejected his claim and cited the measures adopted by European Union to protect the data under *"Safe Harbor Scheme"*. Aggrieved of the decision of Irish authority, he preferred an appeal to the Irish High Court. Irish High Court after admitting the appeal, referred the matter to Chief Justice of European Union for a preliminary examination. His attorney advocated that *"Safe Harbor Agreement"* between European Union and United States of America must be declared as null and void as it fails to protect the rights of the users. Chief Justice of European Union Court seconded his opinion and decided the review of the agreement to protect the Data of the users.[16]

In another case, a 14-year-old girl, Levy, sued her school for violating her First Amendment rights after posting a Snap chat post expressing her displeasure with cheerleading, softball, and school. The school approached the court, calling it *"an important vindication of school'sauthority to protect students and staff and to fulfill school'seducational missions."* In fact, the student delivered the speech off campus and earlier as a precedent, US Supreme Court has decided a similar case in favor of the School where the student had acted within the premises of the School and substantially disrupted the school community rights. Moreover, the office of US president seconded the judgement to protect the students if they commit such acts offcampus and in order to protect their first amendment rights of free speech.

Similarly, in another case of a teenager from Pennsylvania, The U.S. Supreme Court has ruled with a majority of 8-1 that in this era of social media and enhanced technology students must not be punished for their acts of free speech outside the campus. Rights related to Free Speech available to them under First Amendment Act must be protected. Eventually, an advisory was issued to all students to restrict their enjoyments of their rights to free speech on campus as this would affect the educational institutions to discharge their essential objectives.[17]

In another case where, Jordan Peele and Buzz Feed collaborated to create a PSA using AI techniques to ventriloquize Barack Obama, highlighting his opinions on Black Panther and Donald Trump. The video, created using Adobe After Effects and the AI face-swapping tool Fake App, has become a symbol of the power of AI in generating misinformation and fake news. Researchers have developed tools for real-time face swaps, Adobe's *"Photoshop for audio"* allows dialogue editing, whereasanother Canadian origin company offers a service to produce fake voice by feeding fragmented words as a sample. The judge questioned Buzz Feed News about the potential consequences of broadcasting such clips. While scientists are developing tools to spot AI fakes, the

[14]The Editor, *Deccan Herald* (Apr 30, 2024)
[15]The Editor, *India Today* (Nov 21, 2018)
[16]The Editor, "Data Protection Commissioner v. Facebook and Max Schrems", *Standard Contractual Clauses* (2024)
[17]Chung Andrews, "Cheerleader prevails at U.S. Supreme Court in free speech case",*The Reuters*(June 24, 2021)

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best defense against misinformation is instilling media savvy. Provocative videos can be faked by distortion and blurring, and the future of information will be crucial in preventing a dystopia.[18]

LEGAL AND REGULATORY FRAMEWORK FOR DEEP FAKES AND GENERATIVE AI IN INDIA

Article 21[19] also safeguards Right to life and personal liberty of people under Indian Constitution. Personal liberty involves the right to move freely, choose one's place of residence, and engage in any authorized vocation. Indian Copyright Act, 1957, especially Section 51,[20]prescribes for protection of Intellectual Property Rights in India.

Under section 66E of Information Technology Act, 2000 a suitable legal action may be initiated for protecting the identity of an individual.[21]Section 67 of The Information Technology Act, 2000, states that:

"Whoever publishes or transmits, or causes to be published or transmitted in electronic form, any material that is lascivious or appeals to the prurient interest, or if its effect is such as to tend to deprave and corrupt persons who are likely, having regard to all relevant circumstances, to read, see, or hear the matter contained or embodied in it, shall be punished on first conviction with imprisonment of either description for a term which may extend to three years".

In addition to this, accused may be punished under Sections 499, Section 501, Section 502, Section 354Cof Indian Penal Code, 1860.

CONCLUSION

Although in absence of any specific Generative AI law in India, there are a number of laws and regulations that address AI discrimination. Digital Person Data Protection Bill (2022), Information Technology Act (2000), Right to Information Act (2005), and the Draft National Strategy on Generative AI in 2020 by the Ministry of Electronics and Information Technology, all aim to address biases in AI systems. However, enforcing these enactments shall be a challenge, due to lack of dedicated laws, scarcity of specialists, and lack of transparency.

Deep Fakes, a rapidly growing field involving artificial intelligence and multimedia, are creating realistic digital content that can be difficult to distinguish from authentic content. They can be used for entertainment, education, and research, but also pose risks like misinformation, political manipulation, propaganda, reputational damage, and fraud. This Research Paper provides an overview of Deep Fakes techniques, various issues, challenges, and future research trends, aiming to advance the standard of social security and mitigation strategies for a safer digital environment across the globe.

The global nature of the internet and the ease of cross-border access to deep fakes content necessitate international collaboration to develop consistent legal frameworks, share detection technologies, and coordinate efforts to combat this evolving threat. Existing legal frameworks often fail to address the complexities of deep fake technology. Specialized legislation, technological advancements, and international cooperation are essential steps in combating deep fakes-related offenses. A proactive approach and adaptable defenses against misuse are necessary to mitigate the harmful impacts of Deep Fakes technology and preserve the trustworthiness of the digital world.

[18]The Editor, "A.I. could fabricate fake news Artificial intelligence could make fake news even harder to spot" *The Verge*(Jan 2, 2018)
[19]It asserts that:"No one shall be deprived of their personal liberty except in accordance with the procedure prescribed by law".
[20]*Indian Copyright Act, 1957* Chapter I. Preliminary [June 4, 1957] An Act amending and consolidating copyright laws. Be it passed by Parliament in the eighth year of the Republic of India, as follows: 1. Brief title, scope, and commencement. -(1) This Act may be termed the Copyright Act of 1957. Copyright law protects expressions of ideas rather than the ideas themselves. Section 13 of the Copyright Act of 1957 protects literary, dramatic, musical, and creative works, as well as cinematographic films and sound recordings.
[21] Section 66E of *Information Technology Act, 2000* states that "Whoever, intentionally or knowingly captures, publishes or transmits the image of a private area of any person without his or her consent, under circumstances violating the privacy of that person, shall be punished with imprisonment which may extend to three years or with fine not exceeding two lakh rupees, or with both."

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Deep Fakes pose several legal challenges, including privacy invasion, slander, fraud, and intellectual property issues. Privacy invasion can cause emotional distress and harm, while defamation and reputation damage can lead to financial and personal losses. Fraud and misrepresentation can occur through financial fraud, identity theft, and impersonation, raising concerns about digital identity authenticity and potential economic losses. Intellectual property rights can be infringed when deep fakes incorporate copyrighted materials or use someone's likeness without consent, leading to complex legal disputes.

The Right to Privacy in India is a contentious issue due to the Constitution's lacks of explicit privacy-related feature. The Constitution's authors emphasized the right to life as a fundamental right, and the Supreme Court of India has interpreted Article 21 in different ways. As the country grows, the right to life has expanded to include other rights like speedy trial, shelter, environment & public health, safety & security etc. Every person of India is guaranteed the freedom of opinion, speech, belief, faith, and worship by the Indian Constitution, highlighting the importance of liberty. However, Article 21 of the Constitution, which includes the term *"Personal Liberty"*, requires protection for individuals to lead dignified lives, requiring the right to privacy to be recognized.

The most significant problem would be to detect deep fakes in real time and apply detection models across many sectors and platforms. a challenging task because of its complexities, such as the need for these detection models to be efficient and have almost no false positives, and the computational power needed to detect deep fakes in real-time given the enormous amount of data shared on the internet every second. Advanced learning strategies like meta-learning and metric learning, effective structures like transformers, compression methods like quantization, and calculated investments in solid software and hardware infrastructure foundations can all be used to accomplish this goal.

Deep fake's detection methods face challenges such as generalization and robustness, as deep fakes content often circulates on social media platforms after significant changes. To address this, methods such as data augmentation, adversarial learning, attention-guided modules, and feature restoration have been investigated. But Deep Learning models lack interpretability, which is problematic, especially in critical applications like forensics. Privacy issues also arise as private data access is necessary. The quality of Deep Fakes datasets is another challenge; as large-scale datasets often have visual differences from the actual content. Researchers and technology companies like Google and Facebook continuously improve Deep Fakes detection techniques.

Adversarial perturbations can deceive detection models by exploiting vulnerabilities or weaknesses in the underlying algorithms. Despite these challenges, numerous approaches have emerged to identify and mitigate deep fakes, such as incorporating adversarial perturbations, digital watermarking, and block chain technology. These methods aim to not only detect deep fakes but also hinder their creation and rapid dissemination across platforms.

Deep fakes videos are becoming harder to detect as AI algorithms become more sophisticated. This research provides an overview of deep fakes generation, deep learning architectures, detection techniques, and datasets. It aims to curb false information spread, protect digital content integrity, and prevent social, political, and economic damage caused by deep fakes. The Research Paper emphasizes the need for a continuous research in deep fakes detection techniques. Nevertheless, Deep Fakes have potential significance for artistic communication, entertainment, and visual effects.

Countries worldwide have implemented legislation to combat the misuse of deep fakes. The European Union has established a network of fact-checkers to analyze content creation sources, while tech companies like Google, Meta, and X are required to counter fake accounts. China has labelled doctored content using deep fakes tech, and the United States has introduced the Deep Fake Task Force Act to counter such technology. India has to take a leap forward to control the growing menace of abuse of Generative AI Technology such as Deep Fakes, which is the need of hour.

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REGULATING ARTIFICIAL INTELLIGENCE: ETHICAL, LEGAL, AND MANAGERIAL CHALLENGES IN THE DIGITAL AGE

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Swati Bhatia**

ABSTRACT

The rapid advancements in Artificial Intelligence (AI) have brought transformative benefits across industries, yet they also present significant ethical, legal, and managerial challenges. This paper explores the complexities of AI governance in the digital era, examining issues such as algorithmic bias, data privacy concerns, legal accountability, and corporate governance. It highlights the need for robust regulatory frameworks to ensure AI systems operate transparently, ethically, and in alignment with societal values. By analyzing global AI regulations, case studies, and industry best practices, the study provides insights into effective oversight mechanisms. The research underscores the necessity of balancing innovation with ethical considerations, advocating for interdisciplinary collaboration between policymakers, businesses, and researchers. Ultimately, the paper aims to contribute to the ongoing discourse on responsible AI development, offering recommendations for sustainable and adaptive regulatory models.

Keywords: Artificial Intelligence (AI), AI Governance, Ethical AI, Algorithmic Bias, Data Privacy, Legal Accountability.

INTRODUCTION

Artificial Intelligence (AI) has profoundly transformed numerous sectors, including healthcare, finance, education, and public administration. This field integrates technologies such as machine learning, natural language processing, and robotics to replicate aspects of human cognition[1]. The rapid progress in computational resources and data availability has significantly enhanced AI's ability to perform intricate tasks, enabling advanced decision-making and automation across diverse fields.[2]

However, alongside these technological strides, AI introduces substantial ethical, legal, and operational challenges. Issues such as biased algorithms, breaches of personal privacy, questions of accountability, and the potential displacement of workers underscore the urgent need for oversight mechanisms.[3] Governments, corporations, and academic bodies increasingly acknowledge the importance of establishing robust guidelines to ensure AI aligns with societal values and ethical standards.[4] As a result, the governance of AI has become a pressing matter in today's digital landscape.

The Necessity of AI Governance in the Modern Era

The extensive integration of AI systems into everyday life highlights the critical need for well-defined regulatory structures to address risks and promote ethical integrity. Effective oversight is vital to guarantee transparency, responsibility, and equity in automated processes.[5] In the absence of proper controls, AI technologies may perpetuate inequities, infringe upon individual rights, and widen economic divides.[6] Moreover, the deployment of AI in high-stakes areas such as medical diagnostics and law enforcement demands rigorous ethical evaluation to avert harmful consequences.[7]

In addition to ethical dimensions, legal and managerial considerations further emphasize the importance of structured AI governance. Legal systems must clarify responsibility for AI-generated decisions, delineate

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[1]S. Russell and P. Norvig, Artificial Intelligence: A Modern Approach 4th edn. (Pearson, 2021).
[2]I. Goodfellow, Y. Bengio, et.al., *Deep Learning* (MIT Press, 2016).
[3]N. Bostrom, Superintelligence: Paths, Dangers, Strategies (Oxford University Press, 2014).
[4]E. Brynjolfsson and A. McAfee, *Machine, Platform, Crowd: Harnessing Our Digital Future* (W.W. Norton & Company, 2017).
[5]L. Floridi and J. Cowls, "A Unified Framework of Five Principles for AI in Society" 1 *Harvard Data Science Review* (2019).
[6]S. Zuboff, The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power (PublicAffairs, 2019).
[7]V. Dignum, *Responsible Artificial Intelligence: How to Develop and Use AI in a Responsible Way* (Springer, 2019).

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intellectual property protections, and set limits on autonomous operations.[8] From an organizational standpoint, businesses are tasked with ensuring adherence to regulations, facilitating workforce adaptation, and embedding ethical principles into their governance frameworks.[9] These factors collectively underscore the need for a balanced approach that fosters innovation while prioritizing accountability.

OBJECTIVES AND SCOPE OF THE STUDY

This research investigates the ethical, legal, and managerial dimensions of AI governance within the context of the digital age. It assesses existing regulatory models, identifies shortcomings in current policies, and suggests approaches for effective AI oversight. The analysis encompasses a review of international AI regulations, ethical conflicts arising from AI use, mechanisms for legal accountability, corporate governance strategies, and the roles of stakeholders in shaping AI policies.

Through this exploration, the study seeks to advance the conversation on responsible AI development and propose sustainable governance solutions. It draws upon case studies, expert opinions, and legal precedents to offer a comprehensive perspective on the complexities of AI regulation.

Research Questions and Methodological Approach

The study is guided by the following central questions:

1. What are the foremost ethical issues in AI applications, and how can regulatory systems mitigate them?
2. How do existing legal frameworks regulate AI, and what obstacles arise in their enforcement?
3. What organizational practices can ensure ethical AI adoption and compliance with regulatory standards?

   To address these inquiries, the research adopts a qualitative methodology, involving an in-depth review of scholarly literature, legal texts, and policy documents. It further incorporates case studies to highlight real-world instances of AI governance and its broader implications. By integrating insights from various disciplines, this study aims to deliver a thorough examination of the dynamic field of AI regulation.

ETHICAL CHALLENGES IN AI REGULATION

Algorithmic bias poses a formidable obstacle in the deployment of artificial intelligence, often yielding inequitable and prejudiced results. AI systems rely on historical data for training, which may embed societal biases, thereby producing skewed outcomes and decisions.[10] Notable disparities have emerged in areas such as recruitment tools, facial recognition technologies, and credit assessment processes, underscoring the urgent need to prioritize equity in AI design. To counteract algorithmic bias, thorough evaluation, inclusive training datasets, and the adoption of equity-focused algorithms are essential to reduce discriminatory effects in automated decision-making.[11]

Examples of AI-Generated Inequities

Real-world instances of AI perpetuating discrimination have surfaced across multiple domains. For instance, a prominent recruitment algorithm demonstrated a preference for male candidates over female ones, reflecting entrenched biases within historical hiring records.[12]Likewise, facial recognition systems have revealed racial disparities, exhibiting elevated error rates when identifying individuals with darker complexions.[13] These examples highlight the critical need for regulatory supervision and ethical practices in AI development to prevent unjust outcomes and promote fairness across applications.

[8]K. Yeung, "A Study of Responsibility and Accountability in AI Decision-Making" *Harvard Journal of Law & Technology* 31(2), 245-278 (2018).
[9]B. D. Mittelstadt, P. Allo, et.al., "The Ethics of Algorithms: Mapping the Debate" 3 *Big Data & Society* 1-21 (2016).
[10]S. Barocas, M. Hardt, et.al., *Fairness and Machine Learning: Limitations and Opportunities* (MIT Press, 2019).
[11]T. Mitchell, S. Agarwal, et.al., "Addressing Algorithmic Bias: Strategies for Fair and Equitable AI" *Journal of Artificial Intelligence Research* 60, 1-25 (2021).
[12]J. Dastin, "Amazon Scraps Secret AI Recruiting Tool That Showed Bias Against Women" *Reuters* (2018).
[13]J. Buolamwini and T. Gebru, "Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification" *Conference on Fairness, Accountability, and Transparency (FAT)* (2018).

PRIVACY AND DATA PROTECTION

The rise of AI-enabled surveillance has sparked significant concerns about personal privacy, particularly with respect to widespread data gathering and monitoring. Technologies such as facial recognition, predictive law enforcement tools, and tailored marketing strategies depend on extensive personal data, frequently amassed without explicit permission.[14] This pervasive use of AI in surveillance has ignited discussions about reconciling public safety with individual privacy rights, necessitating strong data protection measures to secure personal information.

REGULATORY RESPONSES: GDPR AND BEYOND

In response to privacy challenges, legal frameworks like the European Union's General Data Protection Regulation (GDPR) have instituted rigorous standards for data handling, retention, and use.[15] The GDPR emphasizes transparency, requires informed consent, and grants individuals the right to erasure, establishing a benchmark for AI-related data governance worldwide. Meanwhile, other regions, such as the United States and China, have pursued distinct regulatory strategies, reflecting divergent priorities and administrative approaches.[16]Compliance with these standards is imperative for entities employing AI technologies.

ACCOUNTABILITY AND CLARITY IN AI

A key hurdle in AI governance is the opaque nature of many machine learning models, often described as "black boxes," which complicates understanding their decision-making processes.[17] This lack of clarity presents significant risks in high-stakes fields like healthcare and finance, where interpretability is vital for fostering trust and ensuring accountability. Advancing explainable AI (XAI) frameworks is essential to improve transparency and support well-informed decisions.[18]

Assigning Responsibility for AI Shortcomings

Establishing liability for AI-related failures remains a multifaceted issue. When errors, malfunctions, or ethical violations occur, it is unclear whether accountability rests with the developers, the deploying organizations, or oversight authorities.[19] Legal systems must provide precise directives on responsibility to ensure AI implementation adheres to ethical and juridical norms. The creation of AI ethics committees, enhanced regulatory monitoring, and uniform standards can play a pivotal role in reducing risks and fostering responsible AI stewardship.

Legal Challenges in AI Regulation

The expanding role of artificial intelligence (AI) across diverse industries has prompted nations worldwide to establish governance frameworks aimed at ensuring its ethical and responsible application. The European Union (EU) has emerged as a leader in this domain with its AI Act, a legislative proposal designed to categorize AI systems according to risk levels, imposing rigorous standards on those deemed high-risk.[20] This initiative seeks to bolster transparency, accountability, and safety while safeguarding fundamental rights.

In parallel, the United States has introduced the AI Bill of Rights, a set of principles intended to steer the ethical creation and use of AI technologies. This framework prioritizes data privacy, safeguards against algorithmic

[14]S. Zuboff, *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power* (PublicAffairs, 2019).
[15] P. Voigt and A. Von demBussche, *The EU General Data Protection Regulation (GDPR): A Practical Guide* (Springer, 2017).
[16]C. Kuner, L. Bygrave, et.al., "The Global Divergence of AI and Data Protection Regulations: Comparative Perspectives" *International Data Privacy Law* 11(4), 305-322 (2021).
[17]Z. C. Lipton, "The Mythos of Model Interpretability" *arXiv preprint* arXiv:1606.03490 (2018).
[18]F. Doshi-Velez and B. Kim, "Towards a Rigorous Science of Interpretable Machine Learning" arXiv preprint arXiv:1702.08608 (2017).
[19]R. Calo, "Artificial Intelligence Policy: A Primer and Roadmap" 51 UC Davis Law Review 399-435 (2017).
[20]European Commission, "Proposal for a Regulation Laying Down Harmonized Rules on Artificial Intelligence (Artificial Intelligence Act)" (European Commission, 2021), available at https://ec.europa.eu/digital-strategy.

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prejudice, transparency, and the ability to decline automated decisions.[21] Unlike the EU's enforceable AI Act, this U.S. initiative operates as a non-binding guide, promoting voluntary adherence among enterprises and institutions.

Elsewhere, China has adopted a centralized regulatory model, emphasizing strict supervision and control over AI development. Its policies focus on national security, economic priorities, and state authority, mandating compliance with prescribed ethical and technical benchmarks.[22] Meanwhile, nations like Canada and Australia have crafted governance approaches that seek to harmonize innovation with ethical imperatives, reflecting a balanced perspective on AI advancement.

Obstacles to Global Harmonization

The international arena of AI regulation remains disjointed, posing significant hurdles to achieving uniform standards. A primary challenge stems from differing national priorities: the EU foregrounds human rights and risk-based oversight, the U.S. champions innovation and optional compliance, and China enforces a state-centric model. These contrasting orientations impede the formulation of a cohesive global framework.

Further complicating matters are issues of enforcement and jurisdictional overlap. AI technologies transcend national boundaries, creating ambiguity about which legal system governs in instances of noncompliance. Variations in intellectual property regimes, liability constructs, and privacy protections exacerbate efforts to align regulations.[23] Moreover, the rapid pace of technological progress frequently outstrips regulatory evolution, resulting in oversight deficiencies.

Efforts by bodies such as the United Nations (UN) and the Organisation for Economic Co-operation and Development (OECD) to foster dialogue on global AI governance have met with limited success, hindered by geopolitical rivalries and economic competition. Moving forward, adaptable yet binding international accords will be essential to encourage responsible AI development while nurturing cross-border cooperation.

INTELLECTUAL PROPERTY CONSIDERATIONS IN AI

The emergence of AI-generated outputs has ignited scholarly and legal debates concerning intellectual property (IP) ownership. Conventional copyright doctrines assign authorship to human creators, leaving unresolved whether creations produced by AI warrant comparable protection. Existing legal systems do not designate AI as an author, sparking contention over rights to such works.

A central question is whether ownership should vest in the AI itself, its programmer, or the party employing it. The U.S. Copyright Office has determined that works generated entirely by AI lack eligibility for copyright, underscoring the necessity of human contribution.[24] Similarly, the European Patent Office (EPO) has maintained that only humans may be recognized as inventors, rejecting AI as a patent holder.

Patent and Copyright Issues in AI Advancements

The involvement of AI in pioneering innovations raises additional complexities regarding patent eligibility. Patent law traditionally demands a human inventor, a requirement challenged when AI plays a substantial role in discovery processes. Denying patents for AI-derived inventions could stifle technological progress and discourage investment in such systems.

Moreover, the use of copyrighted materials to train AI without explicit permission has drawn legal scrutiny. Disputes involving AI-generated artworks and text-processing platforms illuminate the tensions between fair use principles and IP rights. Future regulatory strategies may need to strike a balance between safeguarding original creators and promoting AI-driven creativity.[25] Proposals from legal scholars suggest hybrid frameworks that

[21]White House Office of Science and Technology Policy, *Blueprint for an AI Bill of Rights: Making Automated Systems Work for the American People* (The White House, 2022), available at https://www.whitehouse.gov/ostp/ai-bill-of-rights/.
[22]Stanford University, "China AI Policy Initiative" (Stanford Institute for Human-Centered Artificial Intelligence, 2021).
[23]K. Yeung, "Regulating Artificial Intelligence: Lessons from the GDPR" *International Journal of Law and Information Technology* 27(2), 122-145 (2019).
[24]U.S. Copyright Office, "Guidance on Works Containing AI-Generated Content" (U.S. Copyright Office, 2023), available at https://www.copyright.gov/policy.
[25]D. Gervais, "AI and Copyright: Questions That Need Answers" 42 *European Intellectual Property Review* 217-223 (2020).

acknowledge AI-supported outputs while preserving human accountability, necessitating precise guidelines to ensure equitable IP governance in the digital era.

LIABILITY AND LEGAL IDENTITY IN AI ACCOUNTABILITY FOR AI DECISIONS

As AI systems gain greater autonomy, determining liability for their actions poses intricate legal challenges. Traditional accountability models hinge on human agency, prompting uncertainty about whether responsibility falls to developers, producers, or users when AI causes harm.

In cases of defective AI systems, product liability principles might apply if harm results from design flaws. Yet, proving negligence is difficult due to the often-inscrutable nature of AI decision-making. When biases or discriminatory outcomes arise, organizations deploying these systems may face liability for neglecting risk mitigation.[26]

High-stakes applications, such as medical diagnostics or autonomous vehicles, amplify these concerns. Errors from an AI-powered diagnostic tool or accidents involving self-driving cars raise thorny questions of culpability. Some scholars advocate for strict liability regimes, holding developers accountable irrespective of intent, while others favor context-specific assessments.[27]

CONTENTION OVER AI'S LEGAL STATUS

A polarizing issue in AI regulation is the prospect of conferring legal personhood on AI systems. Such status would endow AI with rights and obligations akin to those of corporations. Advocates contend that recognizing highly independent AI as legal entities could clarify liability and streamline governance, enabling contractual duties and accountability mechanisms.[28]

Opponents, however, caution that this could diminish human responsibility, introducing ethical and legal quandaries. Lacking sentience or moral capacity, AI cannot be meaningfully held to account. Additionally, legal personhood might allow firms to deflect liability onto autonomous systems, creating exploitable gaps.

Prevailing regulatory perspectives prioritize human oversight and responsibility for AI actions. Nevertheless, as AI capabilities evolve, ongoing discourse surrounding its legal standing and liability structures will remain pivotal in defining the trajectory of AI governance.

MANAGERIAL CHALLENGES IN AI REGULATION

Corporate Governance and Ethical Stewardship

The proliferation of artificial intelligence (AI) underscores the need for robust governance mechanisms to ensure its principled and conscientious integration. AI ethics panels serve as vital instruments in this endeavor, tasked with supervising AI projects, upholding ethical norms, and addressing potential biases within algorithmic systems. Comprising a diverse array of specialists—such as ethicists, technologists, and legal scholars—these panels offer informed counsel on the development and application of AI.[29] A diligently constituted ethics panel can tackle concerns related to equity, clarity, and responsibility, cultivating confidence in AI-driven operations.

Conscientious AI adoption demands that organizations establish thorough governance structures, incorporating ethical risk evaluations, impact analyses, and strategies to counteract bias. Leading firms like Google, Microsoft, and IBM have instituted such panels to guide their AI endeavors, ensuring alignment with societal expectations and legal mandates.[30] Nevertheless, challenges persist in securing the authority and autonomy necessary for these panels to meaningfully shape organizational AI strategies.

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[26] Mittelstadt, B. D., Allo, P., Taddeo, M., Wachter, S., &Floridi, L., "The Ethics of Algorithms: Mapping the Debate," *Big Data & Society*, 3(2), 1-21 (2016).
[27] J. M. Balkin, "The Three Laws of Robotics in the Age of Big Data" 30 Harvard Journal of Law & Technology 1-39 (2017).
[28] S. M. Solaiman, "Legal Personality for AI Systems: Rethinking Rights and Responsibilities" *Artificial Intelligence and Law* 30(1), 45-67 (2022).
[29] B. Mittelstadt, "Principles Alone Cannot Guarantee Ethical AI" 1 Nature Machine Intelligence 501-507 (2019).
[30] Jobin, A., Ienca, M., &Vayena, E., "The Global Landscape of AI Ethics Guidelines," *Nature Machine Intelligence*, 1(9), 389-399 (2019).

INDUSTRY AUTONOMY VERSUS STATE SUPERVISION

A central contention in AI governance revolves around whether oversight should emanate from industry initiatives or governmental mandates. Advocates of self-governance assert that enterprises possess the technical acumen and flexibility to tailor standards to the swiftly advancing landscape of AI technologies. Voluntary efforts, such as the IEEE Ethically Aligned Design and the Partnership on AI, exemplify industry-led endeavors to promote ethical AI advancement.[31] Critics, however, caution that such approaches may lack enforceability and risk prioritizing commercial interests over ethical imperatives.

In contrast, state-imposed regulation offers a binding framework that compels accountability among AI developers and users. Instruments like the European Union's AI Act and the U.S.AI Bill of Rights seek to codify uniform standards for ethics, safety, and transparency.[32] While this approach ensures consistency and responsibility, overly restrictive measures may hinder innovation and slow AI progress. A hybrid model, blending industry-driven efforts with governmental oversight, may represent the optimal path to nurture ethical AI while sustaining technological growth.

HURDLES IN ENACTING AI GOVERNANCE FRAMEWORKS

The enactment of AI regulatory structures presents considerable obstacles for organizations. A primary difficulty lies in the absence of cohesive, universally recognized standards, resulting in disparate compliance obligations across regions.[33] Moreover, the dynamic and intricate contexts in which AI operates complicate the establishment of fixed benchmarks capable of accommodating its evolving nature.

Resource demands further exacerbate these challenges, as compliance necessitates investments in specialized personnel, legal expertise, and technical reviews. Small and medium-sized enterprises (SMEs) often face disproportionate burdens due to constrained budgets and staffing, potentially placing them at a competitive disadvantage in AI-driven markets.[34]

Strategies for Managing AI Risks

To address AI-associated uncertainties, organizations must deploy meticulous risk management protocols. A robust risk evaluation framework entails pinpointing potential hazards, assessing their consequences, and devising countermeasures. Critical risks encompass algorithmic prejudice, data security weaknesses, and unforeseen outcomes of AI judgments.[35]

One promising method involves conducting AI impact assessments (AIAs), which scrutinize the societal, ethical, and legal ramifications of AI systems prior to implementation. AIAs enable the identification of biases, enhance openness, and ensure adherence to regulatory expectations.[36] Ongoing monitoring and periodic audits of AI systems further strengthen risk management by identifying irregularities and averting unintended effects.

WORKFORCE DYNAMICS AND ORGANIZATIONAL TRANSFORMATION

The advent of AI-powered automation is reshaping labor markets by redefining job functions and skill prerequisites. While AI boosts efficiency and productivity, it also sparks apprehension about workforce displacement, particularly in repetitive, routine roles.[37] Rather than wholly supplanting employment, however, AI is poised to enhance human capabilities and generate new opportunities in fields such as data analysis, machine learning, and AI ethics.

[31]L. Floridi, J. Cowls, et.al., "AI4People—An Ethical Framework for a Good AI Society: Opportunities, Risks, Principles, and Recommendations" 28 Minds and Machines 689-707 (2018).
[32]European Commission, "Proposal for a Regulation Laying Down Harmonized Rules on Artificial Intelligence (Artificial Intelligence Act)" (European Commission, 2021), available at https://ec.europa.eu/digital-strategy.
[33]M. Veale and F. Z. Borgesius, "Demystifying the Draft EU Artificial Intelligence Act" 43 Computer Law & Security Review 105567 (2021).
[34]J. Mökander, M. Axente, et.al., "AI Governance and Human Rights: A Roadmap for AI Regulation" *AI & Society* (2022).
[35]M. Brundage, S. Avin, et.al., "Toward Trustworthy AI Development: Mechanisms for Supporting Verifiable Claims" arXiv preprint arXiv:2004.07213 (2020).
[36]D. Leslie, "Understanding Artificial Intelligence Ethics and Safety: A Guide for the Responsible Design and Implementation of AI Systems in the Public Sector" (The Alan Turing Institute, 2019).
[37]C. B. Frey and M. A. Osborne, "The Future of Employment: How Susceptible Are Jobs to Computerisation?" 114 Technological Forecasting and Social Change 254-280 (2017).

To navigate these shifts, organizations must prioritize reskilling and upskilling initiatives. Programs emphasizing AI proficiency, analytical reasoning, and cross-disciplinary expertise can equip workers to thrive in an AI-augmented economy.[38] Collaboration among educational institutions, industry leaders, and policymakers is indispensable to craft curricula attuned to emerging AI-related skill demands.

Harmonizing Automation with Human Judgment

Achieving an equilibrium between AI automation and human supervision is paramount for ethical and effective AI utilization. Although AI can refine decision-making and streamline operations, overreliance on automated processes risks precipitating biases and ethical lapses.[39] Human involvement remains indispensable in critical domains like healthcare, finance, and justice, where AI decisions carry significant societal weight.

Organizations may adopt human-in-the-loop (HITL) frameworks, which embed human discernment within AI workflows. These models ensure that AI outputs are scrutinized and validated by experts, minimizing errors and biases.[40] Additionally, delineating clear accountability protocols and governance policies enables organizations to manage the intricacies of automation while adhering to ethical principles.

CASE STUDIES AND PRACTICAL APPLICATIONS OF AI GOVERNANCE

The pervasive adoption of artificial intelligence (AI) across sectors has necessitated the creation of regulatory frameworks to ensure its ethical, secure, and just application. Analyzing instances of both regulatory shortcomings and achievements offers valuable perspectives on the efficacy of current governance models and provides direction for refining future policies.

COMPAS Algorithm and Inequity in Judicial Systems

A prominent example of regulatory inadequacy is the Correctional Offender Management Profiling for Alternative Sanctions (COMPAS) algorithm, employed in the United States to predict recidivism risks among defendants. Investigations revealed that COMPAS exhibited racial disparities, assigning elevated risk scores to African American individuals while underestimating risks for white defendants. Despite assurances of impartiality from its creators, the absence of robust oversight failed to detect and rectify these inequities prior to deployment. This case underscores the imperative for meticulous evaluation and openness in AI applications within judicial contexts.

Cambridge Analytica and Breaches of Data Privacy

The Cambridge Analytica controversy exemplifies significant lapses in data protection and AI-driven analytics. By illicitly collecting personal information from millions of Facebook users, the firm leveraged AI to manipulate voter preferences during political campaigns. This breach exposed deficiencies in existing privacy safeguards, prompting heightened examination of AI's role in societal and political spheres. Subsequent enhancements to frameworks like the European Union's General Data Protection Regulation (GDPR) reflect the critical need for anticipatory governance in response to such failures.

Tesla's Autopilot and Safety Risks

Tesla's Autopilot technology has been implicated in several collisions, raising concerns about the sufficiency of AI oversight in the automotive industry. A notable 2016 incident involved a Tesla Model S in Autopilot mode failing to distinguish a white truck against a bright backdrop, resulting in a fatal accident. Analysis indicated deficiencies in the system's situational awareness and an overdependence on automation by drivers. The lack of stringent safety standards at the time contributed to these events, spurring regulators to impose more rigorous protocols for autonomous vehicle evaluation and use.

[38]J. Bessen, "AI and Jobs: The Role of Demand" Economics of AI Conference Papers (2019).
[39]I. Rahwan, M. Cebrian, et.al., "Machine Behaviour" 568 *Nature* 477-486 (2019).
[40]S. Wachter, B. Mittelstadt, et.al., "Why Fairness Cannot Be Automated: Bridging the Gap Between EU Non-Discrimination Law and AI" 41 *Computer Law & Security Review* 105567 (2021).

IBM Watson in Medical Practice

Initially celebrated as a transformative tool for diagnostics and treatment planning, IBM Watson encountered setbacks in healthcare due to unreliable recommendations and poor adaptability to clinical settings. Reports highlighted instances where Watson proposed unsafe or erroneous medical advice, leading to the termination of certain AI initiatives in healthcare facilities. This experience emphasizes the necessity for thorough validation and regulatory scrutiny prior to integrating AI into vital domains like medicine.

REGULATORY ACHIEVEMENTS

GDPR and Enhanced Privacy Protections

The enactment of the GDPR by the European Union in 2018 represents a landmark achievement in AI governance. By mandating transparency, data security, and explicit consent for data usage, GDPR has reshaped how AI systems manage personal information. Its global influence is evident in the adoption of similar standards elsewhere, with its success rooted in enforceable sanctions that compel organizations to uphold responsible practices.

Oversight in the Financial Sector

The financial industry has effectively instituted AI regulations to curb fraud and promote ethical usage. Bodies such as the Financial Conduct Authority (FCA) and the Securities and Exchange Commission (SEC) have developed directives for AI-driven trading systems and credit evaluation tools. These measures aim to reduce systemic vulnerabilities, ensure equitable algorithms, and deter market distortions, yielding fewer fraudulent activities and bolstering public confidence.

Singapore’s Model AI Governance Framework

Singapore has distinguished itself as a pioneer in AI regulation through its Model AI Governance Framework. This structure delineates principles for ethical AI implementation, prioritizing accountability, clarity, and risk management. Entities operating within Singapore must comply with these tenets, aligning AI systems with human-centered values. Widely regarded as a Ascendant model, this framework serves as an exemplar for nations crafting AI policies.

FDA Oversight of AI/ML-Based Medical Software

The U.S. Food and Drug Administration (FDA) has adeptly regulated AI-driven medical software through its Adaptive AI/ML Software as a Medical Device (SaMD) framework. This approach ensures ongoing assessment and validation of AI applications in healthcare, facilitating their safe integration into diagnostics, imaging, and personalized care while minimizing risks of flawed or biased outcomes.

INSIGHTS GAINED FROM AI GOVERNANCE ACROSS SECTORS

The analysis of these regulatory experiences reveals several pivotal lessons for shaping future governance strategies across industries.

The Imperative for Anticipatory Oversight

Cases like Cambridge Analytica and Tesla’s Autopilot incidents illustrate the perils of delayed regulatory action, which can result in substantial societal harm. Proactive frameworks, such as GDPR and Singapore’s model, embed ethical foresight and risk mitigation into AI systems from inception, averting preventable failures.

Clarity and Interpretability

A recurring governance challenge is the opacity of AI decision-making processes. The COMPAS case exemplifies how inscrutable models can perpetuate inequities without accountability. Successful models, such as the FDA’s healthcare regulations, underscore the need for interpretability, ensuring decisions are comprehensible and defensible.

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Interdisciplinary Cooperation

Effective AI governance hinges on collaboration among policymakers, industry stakeholders, and academic experts. The financial sector's success, driven by partnerships between regulators and institutions, and healthcare's progress through dialogue among clinicians, developers, and authorities, highlight the value of coordinated efforts.

Ethical Design and Equity Assurance

The shortcomings of IBM Watson and COMPAS emphasize the centrality of addressing algorithmic bias. Ethical design necessitates diverse datasets, rigorous testing, and sustained oversight to prevent disproportionate harm to vulnerable groups. Governance frameworks should mandate equity reviews and impact evaluations to uphold fairness.

Reconciling Innovation with Oversight

While robust regulations are essential to avert AI-related harms, excessive constraints may hinder progress. Singapore's framework exemplifies a balanced approach, offering clear guidance without unduly encumbering developers. Effective governance fosters innovation while ensuring adherence to ethical and legal standards.

Regulating AI is a multifaceted yet indispensable undertaking requiring a measured approach. Instances of regulatory lapses illuminate the dangers of inadequate supervision, while exemplary models provide critical guidance for crafting sound policies. Future AI governance should prioritize anticipatory measures, transparency, ethical integrity, and adaptable strategies to ensure AI's responsible and beneficial application across domains.

PROSPECTS AND PROPOSALS FOR AI GOVERNANCE

The swift advancement of artificial intelligence (AI) offers remarkable possibilities alongside formidable challenges. To fully realize its potential while curbing associated risks, it is essential to develop responsive regulatory systems, foster ethical progress through global partnerships, and enact enduring governance strategies.

The Demand for Responsive and Versatile AI Oversight

Conventional regulatory models often falter in keeping abreast of AI's rapid evolution. Fixed rules risk obsolescence, potentially stifling innovation or leaving emergent threats unaddressed. Consequently, governance frameworks must exhibit adaptability and flexibility, enabling periodic refinements that align with technological breakthroughs and their attendant complexities.

One suggested strategy involves adopting a Complex Adaptive System (CAS) approach to AI oversight. This framework advocates establishing firm limits to constrain undesirable AI actions, segmenting systems to avert widespread failures, and instituting dynamic governance mechanisms that adjust to technological shifts. Such an approach ensures sustained compliance and accountability, bolstering public confidence and encouraging principled innovation.[41]

In the healthcare domain, the U.S. Food and Drug Administration (FDA) has acknowledged the shortcomings of static regulatory approaches for adaptive AI technologies. Recognizing that modifications to AI-driven medical devices often warrant premarket evaluation, the FDA emphasizes the need for persistent monitoring and updates to maintain compliance and efficacy.[42]

Ethical AI Advancement Through Global Collaboration

Promoting ethical AI development demands a unified international effort. Cross-border cooperation is vital to forge universally accepted ethical norms and governance structures that transcend jurisdictional divides.

[41]European Commission, "AI Governance and the Role of Complex Adaptive Systems" (European Commission, 2024), available at https://ec.europa.eu.

[42]FDA, "Artificial Intelligence and Machine Learning in Medical Devices" (U.S. Food and Drug Administration, 2023), available at https://www.fda.gov.

Multilateral entities, such as the United Nations (UN) and the Organisation for Economic Co-operation and Development (OECD), are instrumental in orchestrating initiatives to establish broadly endorsed AI guidelines.

The OECD's AI Principles, first introduced in 2019 and revised in 2024, represent the inaugural intergovernmental benchmark for AI. These principles advocate for innovative, reliable AI that upholds human rights and democratic ideals, offering pragmatic and adaptable guidance for policymakers and practitioners.[43]

Likewise, UNESCO has taken a proactive stance in advancing ethical AI. Through collaboration with diverse stakeholders, it seeks to ensure that AI's development and application honor human rights and ethical benchmarks.[44]

Standards from organizations like the International Organization for Standardization (ISO) and the Institute of Electrical and Electronics Engineers (IEEE) further reinforce the ethical robustness and reliability of global AI systems. These benchmarks aim to equitably distribute AI's advantages while ensuring technical integrity and evidence-based rigor across applications.[45]

A milestone in this endeavor is the recent Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law, endorsed by nations including the United States, the United Kingdom, and the European Union. This accord strives to align AI advancement with core human rights, democratic principles, and legal integrity, tackling risks such as misinformation, algorithmic inequities, and threats to civic institutions.[46]

Recommendations for Enduring AI Governance

To cultivate sustainable AI governance, policymakers should emphasize transparency, equity, and societal trust. Key proposals include requiring algorithmic reviews, conducting AI impact evaluations, and establishing uniform certification protocols. Furthermore, partnerships between public entities and private enterprises can enhance regulatory efficacy by harnessing industry knowledge while safeguarding public interests.

The use of regulatory sandboxes—secure settings for testing AI innovations prior to broader deployment—enables the evaluation of real-world effects without exposing society to potential hazards. This method fosters innovation while upholding stringent ethical and safety criteria.[47]

Ongoing surveillance and periodic refinement of AI algorithms are critical to ensure continued compliance and performance. Addressing post-deployment oversight challenges requires governance structures capable of real-time adaptation to technological developments and emerging uncertainties.[48]

The stewardship of AI constitutes a multifaceted yet vital undertaking necessitating a judicious approach. Responsive and versatile regulatory systems are indispensable to match the pace of technological progress, ensuring adherence without impeding creativity. Global collaboration is essential to establish cohesive ethical standards and governance frameworks, addressing concerns such as bias reduction, accountability, and societal implications. Proposals for sustainable governance encompass mandatory algorithmic assessments, impact evaluations, standardized certifications, and public-private alliances to strengthen oversight. By prioritizing forward-looking regulation, clarity, ethical integrity, and adaptable strategies, the conscientious and beneficial integration of AI across sectors can be assured.

CONCLUSION

The swift progression of artificial intelligence (AI) brings forth extraordinary prospects alongside substantial hurdles. Crafting effective governance for AI demands a measured strategy that encourages innovation while addressing risks tied to unethical practices, biases, privacy breaches, and regulatory deficiencies. This analysis

[43]OECD, "AI Principles and Ethical Guidelines" (OECD, 2024), available at https://www.oecd.org.
[44]UNESCO, "Ethical AI Development: Global Standards and Governance" (UNESCO, 2023), available at https://www.unesco.org.
[45]Brookings Institution, "Strengthening International Cooperation on AI" (Brookings, 2023), available at https://www.brookings.edu.
[46]Council of Europe, *Framework Convention on Artificial Intelligence and Human Rights, Democracy, and the Rule of Law* (Council of Europe, 2024), available at https://www.coe.int.
[47]Edelman, "The AI Balancing Act: Making the Case for Adaptive Regulation" (Edelman, 2023), available at https://www.edelman.com.
[48]National Academy of Sciences, "Post-Market Surveillance of AI Technologies" (National Academy of Sciences, 2024), available at https://www.nationalacademies.org.

reveals several core insights: the pressing need for adaptable regulatory systems, the importance of global collaboration, and the value of enduring governance approaches.

A recurring observation in current scholarship is the call for regulatory frameworks that are both flexible and responsive. Rigid, unchanging regulatory models fall short in keeping pace with AI's rapid development. Instead, a dynamic, incremental approach to regulation is recommended, capable of evolving alongside technological strides. The notion of regulatory sandboxes—controlled settings for testing AI solutions prior to widespread use—has emerged as a promising method to reconcile innovation with societal safety.[49]

Global collaboration stands out as another vital finding. The disjointed nature of regulatory efforts across nations complicates the enforcement of consistent ethical standards for AI. Entities such as the United Nations (UN), the Organisation for Economic Co-operation and Development (OECD), and the International Organization for Standardization (ISO) have taken steps to formulate international benchmarks for AI oversight.[50] Ethical imperatives, including bias reduction, clarity, and accountability, necessitate a collective worldwide commitment.

Moreover, recommendations for sustainable AI governance underscore the significance of openness, equity, and public confidence. Proposed measures include compulsory algorithmic evaluations, impact analyses, and uniform certification processes. Collaborations spanning government, academic circles, and industry are indispensable for devising robust governance mechanisms. The European Union's AI Act exemplifies how regulations can be structured to enforce compliance without curbing creativity.[51]

A central dilemma in AI governance lies in achieving an equilibrium between nurturing innovation and instituting prudent oversight. Excessively stringent policies could impede technological advancement, curtail economic gains, and limit AI's potential in fields like healthcare, finance, and education. Conversely, lax supervision may precipitate algorithmic unfairness, privacy infringements, misinformation, and societal upheaval.[52]

A practical resolution involves tailoring oversight to the risks posed by specific AI systems. High-risk applications—such as facial recognition or autonomous vehicles—warrant rigorous standards, whereas lower-risk tools, like conversational agents or scheduling software, could benefit from lighter requirements.[53] This graduated framework supports innovation while prioritizing public welfare.

Proactive governance also emerges as a critical consideration. Rather than addressing AI-related challenges reactively, regulatory entities should implement pre-emptive strategies, such as continuous compliance tracking, real-time assessments, and ethical training for developers. Embedding ethical principles during the design phase can forestall violations before they arise.[54]

Engaging the public is equally essential. Initiatives promoting transparency, such as frameworks for explainable AI (XAI), enhance trust by rendering AI processes accessible to laypersons.[55] Additionally, cultivating AI literacy among decision-makers and citizens ensures that governance reflects informed societal values.

Given AI's far-reaching influence across diverse domains, effective governance hinges on interdisciplinary cooperation. AI extends beyond a mere technological concern, encompassing legal, ethical, economic, and social dimensions that demand expertise from varied fields. Engineers, policymakers, ethicists, economists, and jurists must unite to construct comprehensive governance structures that address these interwoven complexities.[56]

[49]European Commission, "AI Governance and the Role of Complex Adaptive Systems" (European Commission, 2024), available at https://ec.europa.eu.
[50]OECD, "AI Principles and Ethical Guidelines" (OECD, 2024), available at https://www.oecd.org.
[51]Council of Europe, "The AI Act and Global Governance Frameworks" (Council of Europe, 2024), available at https://www.coe.int.
[52]Brookings Institution, "Strengthening International Cooperation on AI" (Brookings, 2023), available at https://www.brookings.edu.
[53]Edelman, "The AI Balancing Act: Making the Case for Adaptive Regulation" (Edelman, 2023), available at https://www.edelman.com.
[54]National Academy of Sciences, "Post-Market Surveillance of AI Technologies" (National Academy of Sciences, 2024), available at https://www.nationalacademies.org.
[55]UNESCO, "Ethical AI Development: Global Standards and Governance" (UNESCO, 2023), available at https://www.unesco.org.
[56]Brookings Institution, "Strengthening International Cooperation on AI" (Brookings, 2023), available at https://www.brookings.edu.

Such collaboration can be facilitated through alliances between public and private sectors, academic-industry partnerships, and intersectoral regulatory bodies. Organizations like the World Economic Forum (WEF) and the Institute of Electrical and Electronics Engineers (IEEE) have launched multistakeholder initiatives to connect technology creators with policymakers, fostering practical and visionary governance solutions.[57]

Inclusion of civil society and advocacy groups is also paramount. Governance must embrace diverse viewpoints—from underrepresented communities, labor organizations, and privacy advocates—to ensure policies serve a wide array of interests and advance equitable AI development.

Lastly, sustained research and education are foundational to robust AI governance. Governments should invest in studies of AI ethics, promote interdisciplinary academic programs, and weave AI governance into curricula for computer science, law, and public policy. This equips future leaders to tackle the intricacies of AI regulation and ensures governance remains pertinent amid evolving challenges.[58]

Steering AI governance is a multifaceted yet indispensable endeavor requiring a multifaceted strategy. Responsive regulatory systems, international partnerships, and sustainable approaches are vital to ensuring AI's conscientious deployment. By embracing risk-tailored oversight, proactive monitoring, and cross-disciplinary collaboration, stakeholders can forge a governance ecosystem that nurtures innovation while upholding ethical integrity.

Looking ahead, the landscape of AI regulation must remain fluid and inclusive, involving policymakers, technologists, enterprises, and civil society in shaping AI's trajectory. Through persistent inquiry, transparent practices, and ethical development, AI's transformative capacity can be harnessed for collective benefit while mitigating its potential drawbacks.

[57]IEEE, "Ethical AI and Global Standards" (IEEE, 2024), available at https://www.ieee.org.
[58]National Academy of Sciences, "Post-Market Surveillance of AI Technologies" (National Academy of Sciences, 2024), available at https://www.nationalacademies.org.

SIMULTANEOUS ELECTIONS IN INDIA: ADVANTAGES, CHALLENGES AND IMPLICATIONS ON DEMOCRATIC GOVERNANCE

Manu Datta*

Abstract

Recently, the idea of simultaneous elections has been a subject matter of vigorous political argument. The supporters of idea cite cost effectiveness, continuity in governance, reduction in disruptions caused by frequent elections and convenience as core arguments, whereas opponents apprehend negative implications on federalism and constitutional scheme. Regional parties view simultaneous elections as threat to their existence and argue that they will be short of resources to compete in nationwide concurrent elections. Another argument advanced is that long gap between elections, resulting from concurrent center and state elections, may deprive people from benefit of accountability of political class. A further key assertion of opponents is distinction in nature of political issues at Central, State and Local level and voter's inability to distinguish in both while voting at same time. If elections of state legislature and local bodies will take place along with central government, local issues may be over shadowed. This paper seeks to examine the feasibility and implications of simultaneous elections from constitutional and political perspective. The paper, further examines the impact on simultaneous elections on accountability and democratic norms. The paper argues that decision regarding simultaneous elections cannot be based solely on convenience and cost effectiveness without sufficient deliberation on its constitutional and political implications and reaching at a broad consensus. The paper further argues that divers and realities of democracy in India cannot be ignored before reaching at a final conclusion.

Keywords: Simultaneous elections, Accountability, Democratic Governance, Federalism, Constitutional Amendments.

INTRODUCTION

The Constitution of India, is basically federal in nature. All three organs of state, legislature, judiciary and executive derive their authority from the Constitution, which is fundamental law of the land. Parliament and state legislatures are sovereign in the sphere of functions allotted to them by the constitution.[1] The constitution establishes independent judiciary, tasked inter alia to maintain coordination between center & state relations. The constitution of India envisages co-operative federalism wherein center and state are co-equal to each other. Federalism requires maintenance of balance between federal and provincial powers.[2] The pluralistic democracy, another important feature of Indian Constitution, among other things, implies multi-party system.[3] The multi-party system is suited to diversity of the nation and regional aspirations of people within constitutional limits. Popular sovereignty is asserted by people through general elections at center, state and local self-government level. In initial two decades after promulgation of Constitution in 1950 general elections for Lok Sabha (house of people) and State legislature took place on simultaneously barring few exceptions. After this period, events like premature dissolution of state assemblies, declaration of national emergency and frequent use of Article 356, disrupted the synchronization.. Currently, we witness multiple state and local bodies elections each year keeping politicians and administration engaged. The idea of simultaneous elections has received considerable attention of political establishment as major and significant reform in electoral process. The basic idea is to conduct election of Lok

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[1] Jindal Stainless Ltd. V. State of Haryana, (2017) 12 SCC 1 at p. 554

[2] In the Matter of a Reference by the Governor in Council pursuant to section 53 of the Supreme Court Act, R.S.C. 1985, (2011) SCC Online SC 66

[3] S. R Bommai v. Union of India, (1994) 3 SCC 1

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Sabha and state legislative assemblies at the same time in the interest of economy and efficiency. Election process requires spending of huge amount of money from public exchequer which can be reduced if elections of different democratic institutions are held simultaneously. Thus, the voter should vote for their representatives in Lok Sabha and State assemblies on same day. Supporting the idea of Concurrent elections, NITI Aayog has proposed proportionate sharing of expenditure by center and states and consequent reduction in financial burden in case of simultaneous elections.[4]

THE EVOLUTION OF THE IDEA OF SIMULTANEOUS ELECTIONS

The idea of simultaneous elections is not a novel one. In its first annual report, Election Commission of India in 1983, expressed its strong view to evolving a system "by convention", if not through legislature route, under which general elections of House of people and state legislative assemblies are held simultaneously.[5] In the year 1999, though law commission opined that holding legislative elections separately from House of people should be an exception, the commission was aware that "desired goal" can be achieved in "stages only" and not overnight.[6] The proposals did not receive attention of law makers and government, probably due to complexities involved in the implementation of idea. Recently, High Level committee , chaired by Sh. Ram Nath Kovind, former president of India, has unanimously recommended synchronization of elections of Lok Sabha and State legislative assemblies.[7] The principle argument of unanimous report is that simultaneous elections will lead to "optimization of scarce resources" and avoidance of policy paralysis due to model code of conduct.[8] The committee recommended framework for implementation of simultaneous elections including necessary constitutional amendments. The committee concluded that simultaneous elections of Lok Sabha with State Legislatures does not require ratification by states. The committee recommended dissolution of state legislatures in upcoming elections and fresh elections to be held for remainder term of the assembly.[9]

The proposal for simultaneous elections has met with considerable opposition from significant number of political parties. In representations made to High Level Committee, fifteen opposition parties, representing 35.9% votes opposed the proposal.[10] The opposition for simultaneous election has come not only from regional parties but also from National level parties like Congress and Communist party of India. The parties opposing the proposal apprehend that the proposed changes will require substantial amendment in the basic structure of the Constitution of India and goes against guarantee of federalism.[11] The picture that emerges is that on the one hand Central Government seems firm to give effect to proposal through legislative route, the opposition parties are equally firm to oppose the proposal. Thus, an impartial investigation is required to consider viability of the proposal and find out if mutually agreed way acceptable to all concerned is possible. It needs to be pointed out that term of reference of High Level Committee on Simultaneous election was to find out ways and means to give effect to Simultaneous elections and not to consider it's desirability.

SIMULTANEOUS ELECTIONS: POSSIBILITY OF SINGLE PARTY DOMINANCE

Multiparty system is key feature of Indian democratic structure. The system has developed in process of aspirational tussle within different social groups and suits diversity and heterogeneous demographic nature of Indian population. Emergence of regional parties have certain positive implications for federalism in India. Adam Zeigfeld pointed out that in era coalition governments, formed with the support of regional parties, incidents of

[4] Bibek Debaroy &Kishore Desai," Analysis of Simultaneous Elections: the what , why and how?" NITI Aayog Discussion Paper available at https://legalaffairs.gov.in/sites/default/files/simultaneous_elections/NITI_AYOG_REPORT_2017.pdf

[5] Government of India, Election Commission of India, First Annual Report, available at https://legalaffairs.gov.in/one-nation-one-election (accessed on 24 August, 2024.)

[6] Law Commission of India, 170th Report on Election Reforms, (May 1999)

[7] High Level Committee Report on One Nation One Election. New Delhi: Election Commission of India, 2023. Available at: https://onoe.gov.in/HLC-Report-en. (accessed on 15th August, 2024)

[8] Ibid., at p. 5

[9] Ibid, at p. 276 & 277

[10] The Indian Express, April17 2024 available at https://indianexpress.com/article/political-pulse/one-nation-one-election-parties-opposed-constitution-changes-9213880/ (accessed on 16 August, 2024)

[11] Ibid.

president rule invoking Article 356 of the Constitution of India, have considerably reduced.[12] He further opines that people have more faith in regional parties as advocates of regional issues.[13] In Kuldip Nayyar v. Union of India,[14] Supreme Court of India stated that political parties are sine qua non for parliamentary democracy and parliamentary democracy along with multiparty system is part of basic structure of the Constitution. The existence of multiple parties, including regional parties ensures strong opposition, accountability and deliberation in decision making Synchronization of elections, due to "coattail effect" is deemed as detrimental to multiparty system. If elections of Parliament and state legislatures are simultaneous, the impression of strong national leader weighs in minds of voter and he may tilt towards the same party or candidate at regional level. Empirical research by Warwick University on voter behaviour[15], has shown significant increase in probability of single party winning two elections when held on same day. Democracy is a multi-party system wherein majority forms the government and respects those in minority.[16] A political system where single party has advantage may develop authoritarian tendencies wherein people's rights may be in jeopardy. The experience around the world shows that dominant party system "forestalls governance", therefore, encouragement to competition in policy making is recommended.[17] When voting concurrently for national and regional government, voter is less likely to give sufficient consideration to regional issues and personality of dominant national leaders are far more likely to affect voter' judgement. In Indian federal structure structure, education, policing and health, predominately concerns of state government, are likely to be ignored as issues like national security will weigh more strongly in voter's psyche. The elimination of regional parties, in the process, is likely to give way to single party dominance for substantially long period of time.

CONSTITUTIONAL SCHEME, ALTERATION AND ITS IMPLICATIONS

Constitution of India contemplates federal structure of governance wherein powers are divided between Union and State Governments. The federal division of powers is not absolute and there is strong unitary bias especially at the time of emergency. Union Government may assume the powers of states only if there is breakdown of constitutional machinery or national /financial emergency. Barring these exceptions constitution contemplates cooperation between Central and State governments in there respective fields irrespective of whichever political party in rule in State or Centre. Unless dissolved earlier, Parliament and State legislature is supposed to function for stipulated time of five years .[18]

Elections form most basic features of any democracy. The Constitution confers powers to conduct free and elections on Election Commission of India. Thus, syncronisation of elections, inevitably, requires amendment of the Constitution. . The Constitutional amendments proposed by the High Power Committee include change in Article 83 and 172 of the constitution which provide fix term for house of people and state legislatures. Enabling election commission to prepare common electoral roll will require suitable changes in Article 325 of the Constitution of India. The implementation of the scheme will require one time dissolution of state legislative assemblies at the time of Lok Sabha elections. Presently, dissolution of State assembly is permissible only under Article 356 on the ground of "breakdown of constitutional machinery".

Amendments in the constitution , need to confirm to basic structure , a cherished principle evolved by Apex Court to protect constitutionalism. Such a scheme should also confirm to general structure of polity and

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[12] Adam Zeigfeld, " Cooalition Government and Party System Change: Explaining the Rise of Regional Political Parties in India", Comparative Politics, Vol. 45. No. 01, (October 2012)

[13]Ibid.

[14] (2006) 7 SCC 1 at p. 153 , para. 451&452

[15] Vimal Balasubramanium, Apurva yash bhatia & Sabyssachi Das, "Synchronised Elections, Voter Behaviour and Governance Outcomes: Evidence from India" Warwick Economics and Research Papers, (June-2020) avaialbe at https://warwick.ac.uk/fac/soc/economics/research/ workingpapers/2020/twerp_1276_-_bhatiya.pdf (accessed on 22 Aug., 2024)

[16] R.C Paudyal v Union of India, (1994) Supp 1 SCC 324 at para 54

[17]Geoffrey Macdonald, "Greater Political Competition is Needed to avoid the Governance Pitfalls of Single Party Politics", United State's Institute of Peace, Monday, March 4, 2024 (available at https://www.usip.org/publications/2024/03/perilous-moment-bangladeshs-democracy, accessed on 29August, 2024)

[18] Constitution of India, 1950; Article 83 & 172

governance laid down in the constitution because the context can be known only after reading constitution as a whole . Article 368 of the Constitution of India requires ratification by half of state legislature if any bill seeking amendment is to affect federal structure. The High Power committee on simultaneous elections, in its report, has opined that conduct of simultaneous elections of Central and State legislature will not require ratification as the amendments required does not violate federal structure.[19] It is submitted that the above stated conclusion of the committee requires reconsideration because proposed simultaneous elections will require amendment of articles of constitution stipulating five year term for state legislature as a general rule The intention of Constitution makers was that as a rule Centre should dissolve state legislatures only in exceptional conditions.[20] There is no provisionin existing constitutional scheme for election only for remainder period of mid term dissolved assembly and any amendment to that behalf is serious interference in federal structure. Scholars have also argued that idea of simultaneous elections is inconsistent with westminster model of parliamentary democracy, adopted in India, because the idea of executive losing the majority is inherent in the model and thus fixed term for legislature cannot be fixed.[21] There is no necessary co-relation between terms of Lok Sabha and state legislatures in constitutional scheme.

THE MODEL CODE OF CONDUCT ARGUMENT

Model code of conduct, which is a mutually agreed code of ethics of political parties, remains in force from the date of declaration of elections to the date of conduct of elections. The chief aim of the code is to ensure fairness in electoral process and to prevent use of unethical and corrupt practices in elections. The Code, inter alia, prohibits "ministers and other authorities" to announce any financial grants, lay foundation stones of projects, make any promise of construction.[22] The proponents of simultaneous elections consider frequent Model Code of Conduct as major hurdle in declaration of developmental projects in concerned State or region. The High Level Committee report, citing Parliamentary Standing committee Report of 2015 stated that model code of conduct "puts on hold the entire development programme and activities of Union and State governments in poll bound states".[23] To counter this argument, it may be pointed out that the Election Commission of India provides flexibility in reviewing urgent requests for exception from Model Code of Conduct in public interest and a portal has been created by the commission this regard.[24] It is further submitted that Model Code of Conduct does not prohibit giving effect to existing schemes and projects. In Kolkata Kall Taxi Pvt. Ltd. v State of West Bengal,[25] Calcutta High Court ordered transport authorities to issue licenses irrespective of Model Code of Conduct as it was ongoing project/scheme in public interest which had made considerable progress. In case of State elections, the code is applicable only to the particular state and in case of by election to the particular district where the elections are held.[26] Therefore, MCC is not likely to affect the governance to the extent that entire development project will be put to hold. As the dates of imposition of Model Code of Conduct are known to governments well in advance, there exists ample time for them to make declaration of development projects well in advance.

SIMULTANEOUS ELECTIONS IMPACT ON ACCOUNTABILITY

Democracy, as defined as system of governance for and by the people, is inextricably linked with elections. Elections ensure accountability of representations of people towards electors who wield ultimate power. Under the constitutional scheme of things, elected representatives of people cannot be recalled until they complete their

[19] https://indianexpress.com/article/explained/explained-law/kovind-committee-report-simultaneous-elections-details-9215013/

[20] Dr. Ambedkar speech in Constitution Assembly debates, Vol. IX, No . 5 p.177

[21]Prof Chidananda Reddy, Ms. Laxmi S. Gaudar& Ms. Akila Y Prabhu, "One Nation One Election", Centre for Research in Democracy and Constitutional Government, Karnataka State Law College, Hubbli (available at https://kslu.karnataka.gov.in/storage/pdf-files/1nation1election.pdf , accessed on 29 September 29, 2024)

[22] Election Commission of India, Model Code of Conduct, available at https://www.eci.gov.in/mcc/ (accessed on 26 Aug. 2024)

[23]Report of the High-Level Committee on One Nation One Election, (Government of India, Ministry of Law and Justice, 2023), https://onoe.gov.in/HLC-Report-en accessed 21 September 2024. p. 9

[24] Election Commission of India, MCC Relation and Violation Portal, https://www.eci.gov.in/mcc-relaxation-violation (accessed on 26th Aug. 2024) ss

[25] 2014 SCC Online Cal 7192

[26]Election Commission of India, frequently asked questions on Model Code of Conduct, https://www.eci.gov.in/faq (accessed on Sept. 21, 2024)

stipulated time in office. Similarly, executive remains in office until it enjoys majority in legislature. The proposal to cut short the tenure of legislative bodies, elected in a democratic manner, will deprive people of lawful and legitimate aspirations from their legal representatives. The legislators may plead lack of sufficient time to avoid accountability for their omissions to fulfil promises. Citizens may not be able to evaluate government which could not complete its term mandated by Constitution. If simultaneous election is made a rule, democratic right of representation of people in state assemblies will be seriously affected. Though democracy is best suited to meet aspirations of "We the people." , protect rights, and dignity it is not flawless system of governance. Separate elections of centre and state work as "corrective measure" against any "emotionally charged verdict" given by majority voters favour of a political party in Lok Sabha elections,[27] ensuring accountability of central government.

It is submitted that makers of Constitution were well aware that in course of time, the synchronisation between elections of Lok Sabha and State Legislature will come to an end. Simultaneous elections in initial decade and half were not result of any forced measure. State Legislatures and Governments were contemplated by makers of constitution as independent entities representing regional aspirations of people If state elections are simultaneous to the elections of Lok Sabha, as a forced and essential measure, the connect people feel with state governments will be reduced. [28] The public perception will be that State Legislatures and Governments are subordinate entities of lesser significance. The expectations of people from state Governments will not come into forefront and state governments will escape from accountability and effective public scrutiny of their acts or omissions. Such a situation will not be fair to spirit of federalism. Federalism is among the basic features of the constitution of India and represents a compromise between need of unity and pluralism. Federalism is sine qua non for democratic polity. In the absence of effective federalism, concentration of powers and accountability is in all probability reduce the effect of people's voice in governance. The concept of cooperative federalism envisages harmonious relationship between central and State governments and non-interference by one in exclusive domain of another. The concept of "federal balance" contemplates that "there is no unwarranted or uncalled for interference by the centre which would entail encroachment by centre in to the powers of the state." [29] Federal structure ensures vertical distribution of powers at Central and State level. An attempt towards subduing provincial political structure in all probability violate the concept of limited governance. Centralisation of powers, resulting from reduced significance of State legislature may result in autocratic behaviour of Central Government as any absolute power tends to do.

The High-Level Committee on Simultaneous election, chaired by former President of India Sh. Ram Nath Kovind Committee has recommended that in case of mid term dissolution of State assembly or Lok Sabha, the newly elected legislature's tenure should only extend to remaining duration of dissolved legislature. It is submitted that such provision for mid term election will defeat objective of avoiding duality of expenditure. Further, by respecting right of people to choose representatives for fixed duration, there will be serious compromise with federal principle which ranks high in the basic structure of the constitution.[30] An argument for simultaneous elections should not ignore the pros of separate elections, especially in Indian context. Such elections enable thoughtful of national and regional issues separately. Secondly, such elections have served well in plural society.[31] Frequent elections ensure accountability by providing "democratic feedback" to the government in power in centre.[32]

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[27] Nilanjal Mukhopadhyay, " Why Simultaneous Elections may Reduce India to World's Largest Democracy, 'only in name' , The Wire, March 3, 2024 available at https://scroll.in/article/1055859/simultaneous-elections-what-are-the-implications-for-indian-federalism

[28] Louise Tillin, " Simultaneous Elections: What are implications for India's Federalism", Scroll.in, September 17, 2023 avialable at https://scroll.in/article/1055859/simultaneous-elections-what-are-the-implications-for-indian-federalism

[29] State (NCT) of Delhi v Union of India, (2018) 8 SCC 501 at para 131 to 133

[30] Raju Ramachandran, "Why one Nation One Election is a Challenge for Basic Structure Doctrine and Supreme Court", The Indian Express, March 2024 available at https://indianexpress.com/article/opinion/columns/one-nation-one-election-basic-structure-doctrine-supreme-court-9223794/ (assed on April 18, 2024)

[31] S.Y. Quraishi, "Simultaneous Elections in Plural Societies" **Economic and Political Weekly** (Vol. 59, Issue 1, 2024), available at https://www.epw.in/journal/2024/1/perspectives/simultaneous-elections-plural-societies.html.

[32] Observer Research Foundation, "Why One Nation One Poll, Needs Greater Consensus", Jun 27, 2019, available at https://www.orfonline.org/expert-speak/why-one-nation-one-poll-idea-needs-greater-consensus-52451 (accessed on 28 August, 2014)

LAW COMMISSION DRAFT PROPOSAL: CRITICAL ANALYSIS

Law Commission of India, in its draft report on submitted in 2018,[33] has sought to make strong case in favour of simultaneous elections. The commission opined that simultaneous elections will save valuable time of political parties and governments which they "can better dedicate their time to developmental activities" than "tend to invest their time and energy more on elections". It is submitted that the opinion of Law commission is based more on presumption that recurring elections are primary or significant cause of political parties not devoting their times on developmental activities. It is unlikely that political activities of ruling parties will be paused with gap in elections. Lack of accountability may even decrease the quality and quantity of development work.

The commission has examined the developments in electoral system of democracies worldwide to make a case for simultaneous elections including South Africa, United Kingdom, Sweden and Belgium. It is submitted that decision on issue likely to have consequences on Constitutional scheme of things should be based on consideration of peculiar political and social and state of affairs existing in India. Some of the relevant factors in debate of simultaneous elections peculiar to India context are: remarkable diversity, regional aspirations and huge population.

CONCLUSION

The implementation of scheme of concurrent elections, and constitutional amendments in the process, is likely to impact federalism, constitutional scheme and democracy in a significant manner. There are strong counter arguments and lack of consensus to the proposal of simultaneous elections despite the report of High-Level Committee and Law Commission of India. A scheme for concurrent elections should be based on wider political and civil society consultation and consensus and fair play to all stakeholders should be ensured. As Union and State legislature are equal in constitutional scheme, forced dissolution may go against federal principle. Consensus based concurrency in elections, on the other hand, enabled through cooperation between Union and States will strengthen federalism. The consideration of administrative convenience and economy should be weighed with wider implications on democracy and accountability. National and regional political parties may, in consultation with election commission may develop a convention of conducting elections concurrently especially when gap between two elections does not exceed one year.

[33] Law Commission Draft Report on Simultaneous Elections, 30 August, 2018 (para. 2.27)

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DETERMINATION OF LEGAL DISPUTES AND ONLINE DISPUTE RESOLUTION: RETROSPECT AND PROSPECTS

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Abstract

The use of technology has revolutionized the way people interact, and as a result, disputes can arise in various settings, including e-commerce, and other online platforms. Online Dispute Resolution is a relatively new mechanism that uses technology to resolve disputes. Online Dispute Resolution has gained significant popularity in recent times due to its ability to provide quick and cost-effective dispute resolution.

Online Dispute Resolution platforms are online tools that are designed to help parties resolve disputes using the internet. There are several types of Online Dispute Resolution platforms available, each with its unique features and benefits. The most common types of Online Dispute Resolution platforms are Videoconferencing Platforms, Chat-Based Platforms, Online Arbitration Platforms, Online Mediation Platforms, Online Negotiation Platforms, and Hybrid Platforms including Mobile Applications.

The rise of e-commerce in India, fuelled by a large and growing population, huge internet penetration, and increasing UPI transactions, has also led to a surge in consumer disputes. With a mobile connection reaching a vast majority of the population, Online Dispute Resolution platforms offer a promising solution to address these issues. Online Dispute Resolution can provide a faster, cheaper, and more accessible way to resolve disputes compared to the traditional court system, which is often overloaded and slow. This is especially important in a country like India where court cases can drag on for years.

The paper examines the differences between ODR and ADR and how they can be used to effectively resolve conflicts. ODR refers to the use of AI and other technologies to facilitate the resolution of disputes, while ADR is a process of resolving disputes outside of the traditional court system. The paper analyzes the benefits and drawbacks of both ODR and ADR, including increased access to justice, efficiency, cost-effectiveness, and privacy concerns. The study also discusses some of the challenges and limitations of these approaches, including issues of enforceability and potential bias in decision-making. Finally, the paper concludes that ODR, ADR, and AI are valuable tools for resolving disputes in the digital age, and their use can significantly improve access to justice and enhance the effectiveness of the legal system.

Keywords: Dispute Resolution, Alternate Dispute Resolution, Online Dispute Resolution, Artificial Intelligence

INTRODUCTION

The determination of the disputes that emerge out of inter-se dealing in personal settings, propriety settings including commercial settings has been the core concern of human beings. Multiple methods have evolved for negotiating disputes including court proceedings, mediation, arbitration, conciliation, etc. The boom in e-commerce transactions in India, fuelled by a huge and growing population, wide internet penetration, and increasing UPI transactions, has also led to a surge in legal disputes on account of digital frauds, double transactions, etc. A relatively new mechanism implying Information and Communication Technology tools (ICT tools) to determine disputes has evolved through the use of technology. Technology has revolutionized the way people interact and deal with each other. Online Dispute Resolution has been the futuristic determination method, which has obtained significant recognition, especially in the post-COVID scenario. Its significance, on account of its capacity to provide fast and cost-effective dispute determination mechanisms to help parties in the resolution of disputes using digital technology, has found favor with people. Online Dispute Resolution platforms, i.e., Videoconferencing Platforms, Chat-Based Platforms, Online Arbitration Platforms, Online Mediation Platforms, Online Negotiation Platforms, and Hybrid Platforms including Mobile Applications have revolutionized the age-old mechanisms.

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Online Dispute Resolution platforms offer a promising and simple solution in comparison to the traditional court system, which is often costly, time-consuming, requires physical presence, overloaded, and slow. This is especially important in a country like India where court cases prolong for years.

ONLINE DISPUTE RESOLUTION (ODR)

In India, the Online dispute resolution (ODR) process has been witnessed as an alternative to conventional dispute resolution methods of court-based litigation and arbitration[1].

Online dispute settlement is a process that involves the use of digital, internet, and communication technologies and is designed to be an alternative to traditional dispute resolution processes. The primary goal of ODR is to provide a quick, cost-effective, and more efficient, solution to dispute settlement.[2] ODR has also been defined, "to mean a dispute resolution mechanism and process that uses and employs technology to facilitate communication and negotiation between parties to resolve disputes in a cost-effective and timely manner."[3] It facilitates communication between the parties, streamlines the negotiation process, and provides a neutral third party to assist in the settlement and resolution of the dispute.

UTILITY OF ONLINE DISPUTE RESOLUTION

The following are significant benefits of ODR which can be beneficial for dispute determination in India:

1. ODR improves Access to Justice.[4]
2. ODR is a Cost-Effective Method of settlement of disputes
3. It requires no physical presence or face-to-face interaction.[5]
4. It is time-saving through faster settlement of disputes.[6]
5. It provides improved Efficiency because of the elimination of the need for physical documentation, etc.[7]
6. ODR is more environmentally friendly and improves sustainability.[8]
7. ODR platforms maintain neutrality and no influence of various external factors.[9]
8. ODR also works in the preservation of relationships as it is less confrontational than traditional dispute resolution methods.[10]
9. The ODR mechanism is more convenient to the participants because it does not require physical travel to take part in the online proceedings.[11]

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[1] Chinecherem O. Ubaka, Online Dispute Resolution (ODR) and Alternative Dispute Resolution (ADR): Two Parallel Lines Or Not?, available at https://www.linkedin.com/pulse/online-dispute-resolution-odr-alternative-adr-two-parallel-ubaka (last visited on February 10, 2025)

[2] Deepak Verma, Anshu Banwari and Neerja Pande. Online Dispute Resolution, *available at* https://www.intechopen.com/chapters/61440, (last visited on February 12, 2025)

[3] European Commission, (2017), Online Dispute Resolution: An Introduction *available at* https://ec.europa.eu/info/publications/online-dispute-resolution-introduction_en, (last visited on February 15, 2025)

[4] Bar & Bench, *available at* https://www.barandbench.com/columns/online-dispute-resolution-the-way-forward-for-india, (last visited on February 15, 2025)

[5] The Hindu, *available at* https://www.thehindu.com/news/national/online-dispute-resolution-can-reduce-time-cost-of-justice-nlsiu-study/article30988000.ece, (last visited on February 18, 2025)

[6] Ibid

[7] Hindustan Times, *available at* https://www.hindustantimes.com/cities/mumbai-news/online-dispute-resolution-may-help-tackle-pendency-of-cases-says-expert-101614269987903.html, (last visited on February 18, 2025)

[8] Verma, A. (2019). Exploring the potential for sustainable development through online dispute resolution in India. International Journal of Sustainable Development and World Ecology, 26(8), pp. 721-727, *available at* https://doi.org/10.1080/13504509.2019.1636623, (last visited on February 20, 2025)

[9] The Indian Express, *available at* https://indianexpress.com/article/india/india-news-india/online-dispute-resolution-a-good-way-to-decrease-legal-backlog-pankaj-mohan-2816944/, (last visited on February 20, 2025)

[10] Online Dispute Resolution System- A way toward hassle free dispute resolution and a road into the future, *available at* https://blog.ipleaders.in/odr/, (last visited on February 20, 2025)

[11] The Economic Times, *available at* https://economictimes.indiatimes.com/small-biz/legal/online-dispute-resolution-emerging-as-a-better-option/articleshow/71320958.cms, (last visited on February 22, 2025)

10. ODR provides greater transparency because everything is stored online.[12]

11. It can take care of a backlog of pending cases.

India has been actively integrating ODR in recent years, i.e., the Online Consumer Mediation Centre (OCMC) was established at the National Law School of India University, Bengaluru under the aegis of the Ministry of Consumer Affairs, Government of India.[13]

The e-Committee of the Supreme Court of India was set up to promote the adoption of technology in the justice system. For example, the e-Courts Integrated Case Management System (ICMS) and the National Judicial Data Grid (NJDG)[14] launched by the Indian Government to provide and facilitate the filing of cases, payment of court fees, and tracking of case status[15] and National e-Governance Service Delivery Gateway (NSDG)[16] which is a national platform that provides the single-window platform to a range of e-governance services, including ODR.

Despite the potential benefits of ODR,[17] there exists a lack of legal framework, the digital divide between haves and have-nots, trust and reliability issues, technical issues limited awareness, etc.

DISPUTE DETERMINATION: ALTERNATIVE EFFICACIOUS METHODS

ADR or Alternative Dispute Resolution is another efficacious method of settling disputes outside of the traditional court system. ADR includes various processes such as mediation, arbitration, negotiation, and conciliation, among others[18]. These processes are designed to help parties resolve their disputes in a cooperative and non-adversarial manner[19] and in a faster and less expensive way in comparison to court proceedings. ADR processes are often less rigid and less structured than court proceedings[20], which can make them more accessible and less intimidating for parties who are not familiar with the legal system.[21]

1. **Arbitration** is another commonly used ADR process. In arbitration, the parties agree to have their dispute resolved by an arbitrator, who makes a decision that is binding on the parties. Arbitration is often used in commercial disputes, particularly in international trade.[22]

2. **Mediation** is one of the most commonly used ADR processes. In mediation, a neutral third party (the mediator) helps the parties to identify their issues and interests, explore options for resolving their

[12] Legal Service India, *available at* http://www.legalserviceindia.com/legal/article-1570-online-dispute-resolution-in-india.html, (last visited on February 22, 2025)
[13] https://consumeraffairs.nic.in/sites/default/files/file-uploads/annualreports/1535004643_AR_2016-17.pdf, (last visited on February 22, 2025)
[14] Supreme Court of India, E-Committee, 'E-Committee: About Us', *available at* https://ecommitteesci.gov.in/ aboutus.php, (last visited on February 23, 2025)
[15] eCourts Services, 'eCourts Mission Mode Project', *available at* https://ecourts.gov.in/ecourts_home/static /about_us.php., (last visited on February 24, 2025)
[16] National e-Governance Division, 'National e-Governance Service Delivery Gateway', *available at* https://nsdg.gov.in/, (last visited on February 26, 2025)
[17] Strengths and Challenges in Online Dispute Resolution System, *available at* https://viamediationcentre.org/readnews/MTA2Nw==/Strengths-and-Challenges-in-Online-Dispute-Resolution-System (last visited on March 01, 2025)
[18] United Nations Commission on International Trade Law (1985), UNCITRAL Model Law on International Commercial Arbitration., *available at* https://www.uncitral.org/pdf/english/texts/arbitration/ml-arb/07-86998_Ebook.pdf, (last visited on March 01, 2025)
[19] What is ADR? New York State Unified Court System, *available at* https://ww2.nycourts.gov/ip/ adr/What_Is_ADR.shtml, (last visited on March 01, 2025)
[20]American Bar Association, (2019), ADR: The Basics, *available at* https://www.americanbar.org/groups/dispute_resolution/resources/adr_basics/, se also National Center for State Courts, (2019), A Guide to Alternative Dispute Resolution, *available at* https://www.ncsc.org/__data/assets/pdf_file/0005/49128/ODR-A-Guide-to-Alternative-Dispute-Resolution.pdf, see also International Mediation Institute, (2022), Alternative Dispute Resolution (ADR), *available at* https://imimediation.org/adr/, (last visited on March 10, 2025)
[21] Alternative dispute Resolution, Hawaii State Judiciary, *available at* https://www.courts.state.hi.us/services/ alternative_dispute/advantages_of_adr#:~:text=ADR%20processes%20have%20a%20number,the%20process%20and%20the%20results, (last visited on March 12, 2025)
[22] What is Arbitration?, WIPO, *available at* https://www.wipo.int/amc/en/arbitration/what-is-arb.html#:~:text=Arbitration%20is%20a%20procedure%20in,instead%20of%20going%20to%20court. (last visited on March 15, 2025)

disputes, and reach a mutually acceptable agreement. Mediation can be used in a wide range of disputes, including family law, employment law, and commercial law.[23]

3. **Negotiation** is also a form of ADR that involves the parties working together to settle. Negotiation can be done on a one-on-one basis or through a process that involves multiple parties. Negotiation can be used in a wide range of disputes, including personal injury cases, employment disputes, and business disputes.[24]

4. **Conciliation** is a process that is similar to mediation, but it involves the conciliator taking a more active role in the dispute resolution process. The conciliator will suggest solutions to the parties and help them to negotiate a settlement.[25]

ADR is a valuable means for the settlement of disputes which can be used in a wide range of disputes, making them versatile tools for resolving conflicts.

INTEGRATING ONLINE DISPUTE RESOLUTION WITH MEDIATION: ONLINE MEDIATION

It is important to mention that the Mediation Act, 2023 of India provides legal recognition for Online Mediation[26] as a special law dealing with mediation in India. The very definition of mediation under the Mediation Act provides that mediation means and includes a process of settlement of disputes which may use expressions words like mediation, pre-litigation mediation, online mediation, community mediation, conciliation, or any other word of similar meaning, wherein the parties in dispute try to reach an amicable and agreeable resolution of their dispute with the help of a third party which is called a mediator.[27] It specifically talks of online mediation and also mandates online mediation including pre-litigation mediation which may be held at any stage of mediation, with the prior written approval of the parties which can be taken through electronic form. This may include an encrypted electronic mail service, conferencing by video or audio mode, or both secure chat rooms to ensure the essential elements of integrity of proceedings and confidentiality.[28]

ICT tools can employ Artificial Intelligence which is defined as the theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages.[29]Artificial Intelligence (AI) leverages computers and machines to mimic the problem-solving and decision-making capabilities of the human mind.

Today, researchers are exploring numerous AI applications that promise to revolutionize work, communication, education, and entertainment. These innovations are gradually integrating into daily lives, heralding what many AI experts call the age of digitalization. Despite its promise, digital methods remain a complex and often misunderstood field raising intricate issues around privacy, trust, and autonomy. One significant concern is that online systems might not only enhance human skills but also replace them, threatening jobs and incomes. To address this, national policies are being developed to create new online-related skill sets to mitigate job losses and prepare for new employment opportunities generated by AI advancements. In India, these policies are crucial as the country navigates the intersection of technology and its vast workforce.

In the context of legal disputes, Online Dispute Resolution (ODR) and Alternative Dispute Resolution (ADR) mechanisms can transform dispute determination. These tools can streamline case management, predict

[23] J. Kishore Kumar, Spl.Judicial Magistrate of I Class Proh.& Excise Court, Srikakulam, *available at* https://districts.ecourts.gov.in/sites/default/files/Excise%20Courtwrkshopiv.pdf, (last visited on March 10, 2025)
[24] Ibid
[25] Amazing facts to know about Arbitration, Conciliation and Mediation, *available at* https://blog.ipleaders.in/ arbitration-conciliation-and-mediation/#:~:text=In%20conciliation%20the%20conciliator%20plays,objective %20to%20the%20parties'%20dispute.&text=In%20Conciliation%2C%20the%20conciliator%20also,does% 20not%20give%20any%20judgement., (last visited on March 12, 2025)
[26] Section 30, The Mediation Act, 2023
[27] Section 3(h), The Mediation Act, 2023
[28] Section 30, chapter IV, The Mediation Act, 2023
[29] Oxford English Dictionary

outcomes based on precedent, and even facilitate negotiations. By incorporating ODR using AI into these processes, India can enhance the efficiency, accessibility, and fairness of its legal system, ensuring it meets the challenges of the digital age.

ODR tools can streamline and modernize the process of filing, processing, and resolving disputes. This method allows people to submit complaints with other documents, and evidence electronically through digital platforms.

The process of electronic filing through developed AI tools brings several benefits to the parties:

i. It significantly enhances accessibility by eliminating geographical constraints, allowing individuals from remote areas to submit disputes conveniently.

ii. It promotes efficiency by reducing paperwork, manual handling, and processing time, thereby expediting the resolution process.

iii. Electronic submission of disputes fosters transparency and accountability as it maintains a digital trail of submissions, making sure that all digital documents are securely stored and easily retrievable for reference.

CONCLUDING OBSERVATIONS

This digital and technology-based approach aligns with the broader global trend towards e-governance and digitalization which ultimately enhances access to justice and fosters confidence in the redressal process. Furthermore, the digital policy of India underscores the importance of integrating e-courts into the mission mode of the e-government project. By integrating e-courts into this broader mission mode project, the policy seeks to streamline the grievance redressal process and ensure swift and effective resolution of disputes in the digital sphere.

The Draft E-Commerce policy of India demonstrates a forward-looking approach towards enhancing protection in the e-commerce sector. By embracing electronic redressal mechanisms and leveraging technology to establish e-courts, the policy aims to address the unique challenges and opportunities presented by e-commerce transactions, ultimately fostering a more robust and people-friendly digital marketplace.[30] A similar policy can be adopted for the settlement of familial and other types of disputes. Niti Aayog prepared a policy document "Designing the Future of Dispute Resolution, The ODR Policy Plan for India"[31] which stresses various aspects of Online Dispute Resolution, examples of the foreign jurisdiction, pros, and cons of ODR in India, it also mentions various legal and regulatory barriers and challenges faced by the ODR mechanism. The policy highlights that disputes can be best settled through the ODR mechanism.[32]

During the age of rapid technological advancements, online dispute resolution (ODR) platforms and AI-generated tools can have a big impact on the dispute resolution mechanism.

Technological advancements have transformed people's choices and preferences as well as created new types of demands. Digitization, easy access, and availability of technology have provided a large variety of choices, new and easy payment methods, improved services, and a way of affecting choices.

ODR or Online Dispute Resolution is a relatively new concept in India, but it has gained significant momentum in recent years. ODR is particularly useful in India, given the country's large population and vast geography, which makes it difficult for parties to attend physical hearings and resolve disputes in a timely and cost-effective

[30] Agarwal, N, Online Dispute Resolution in India: A Review of Progress and Prospects, National Law School Journal (2018), 4(2), page. 73-83.
[31] Designing the Future of Dispute Resolution, The ODR Policy Plan for India, The NITI Aayog Expert Committee on ODR, October, 2021, *available at* https://www.niti.gov.in/sites/default/files/2023-03/Designing-The-Future-of-Dispute-Resolution-The-ODR-Policy-Plan-for-India.pdf, (last visited on March 15, 2025)
[32] Ibid

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manner. ODR can tackle this subject by allowing parties to resolve disputes from the comfort of their own homes or offices, using their computers or mobile phones.[33]

The employment of ODR in India is gaining popularity, and it has many advantages over traditional dispute resolution methods. ODR provides a convenient, efficient, and cost-effective way for parties to resolve their disputes, particularly in areas such as consumer disputes, e-commerce, banking, insurance, and healthcare. With the increasing popularity of online transactions and digital payments in India, the adoption of ODR is likely to become more widespread in the future.[34]

Artificial Intelligence (AI) holds significant promise in transforming various aspects of life, including the legal domain. By integrating AI within Online Dispute Resolution (ODR) and Alternative Dispute Resolution (ADR) frameworks, India can enhance the efficiency, accessibility, and fairness of its legal system. This can be achieved through different models of AI implementation in dispute resolution:

a) **Model 1, Referral to Arbitration and Mediation:** ODR and AI tools will refer disputes to external links that direct the parties involved to Arbitration and Mediation law and services. This model leverages AI to identify appropriate ODR mechanisms and connect disputants with the necessary resources, ensuring a streamlined and efficient resolution process.

b) **Model 2, Suggesting Possible Solutions:** In this model, ODR and AI tools can be developed that can analyze the dispute and suggest possible solutions to the parties involved. By evaluating the specifics of each case and drawing on vast databases of similar disputes and outcomes, ODR can offer tailored recommendations, helping parties reach a mutually acceptable resolution more quickly.

c) **Model 3, Interactive Analysis and Settlement Steps (Amazon Alexa Type):** This advanced model uses AI to delve deeply into the dispute, seeking input from the parties through interactive queries. ODR can then suggest actionable steps for settlement and potential ways to resolve the conflict. This model combines analytical capabilities with interactive engagement to facilitate more nuanced and effective dispute resolution.

In conclusion, ODR and AI processes offer a promising avenue for improving dispute determination in India. By adopting these models, the legal system can become more adaptive, responsive, and equitable, meeting the challenges of the digital age and positioning India at the forefront of legal technology. Embracing ODR will not only enhance the current legal framework but also ensure that justice is more accessible and efficient for all.

However, the cache remains,' ODR and AI developed tools are good servants but bad masters' as human emotional values and imagination cannot be replaced by machine-driven platforms.

[33] Singh, A, Online Dispute Resolution: The Need of the Hour in India, Asian Journal of Legal Studies (2021), 2(2), page. 68-79.
[34] Ibid

THE LEGAL TIGHTROPE: NAVIGATING BETWEEN FREE SPEECH AND DEFAMATION IN SOCIAL MEDIA

Khaja Shereen*

Abstract

Striking the right balance between freedom of speech and defamation has become the toughest challenge in this digital era, as the omnipresence of social media has expanded both risks and opportunities. In India, this balance is controlled by constitutional provisions such as Article 19 for free speech and Article 21 for personal reputation, while the limits are defined by statutory laws including the Indian Penal Code and the Information Technology Act. This paper delves into the nuances of defining and enforcing defamation in a world where the anonymity, global reach, and jurisdictional variance of social media blur legal contours. Key judicial decisions, including Subramanian Swamy v. Union of India and Shreya Singhal v. Union of India, throw light on how the Indian judiciary attempts to balance the tensions in upholding free speech and ensuring that individuals are not harmed through defamation. These cases exemplify efforts of the judiciary to balance individual rights with societal needs in a world whose walls are closing in. Recent trends have seen increased scrutiny of social media platforms and high-profile libel cases involving celebrities, underlining that there is now even greater call for powerful legal strategies that will reduce libel while encouraging bona fide public discourse. The paper hints at regulatory reform, which perhaps would be in the decriminalization of defamation and the enticing of boosted self-regulation by those social media platforms, to cope with defamation within digital communication. This article ultimately proposes an approach that is sensitive to global standards and one that will ensure reputation protection without interfering with the right of free expression—hence, a decent online environment.

Keywords: Balance, Defamation, Freedom, Judiciary, Social Media

INTRODUCTION

In the age of digitalization, social media has become a part and parcel of daily lifestyle, redefining the way of communication, information sharing, and public opinion-molding. It is right here that Facebook, Twitter, and Instagram play their role in giving a global stage for the articulation of ideas, beliefs, and news to reach out to millions of people within a few clicks. It has empowered individuals with speech democratization in shaping a more connected and informed society.[1] However, it has also evinced the need to balance the right of free speech with that of protection from defamation.

The great speed of information dissemination in social media makes it so that such statements, true or not, can easily catch on and with serious consequences. One post can easily change one's reputation for the better or for the worse, influence public opinion, and even affect private lives or professional activity.[2]

It is at this juncture that the legal framework regarding free speech and defamation becomes very crucial. The task of ensuring that these laws are effectively carried out while at the same time safeguarding the fundamental rights that are sensitive, more so in a country like India where the judiciary and legislative bodies are constantly trying to find a balance between them.

The paper will focus on understanding the subtleties in the relationship of free speech and defamation on social media with a closer look at the legal landscape in India. In analyzing the cases and live examples available at the moment, it will note the processes that are undergoing to strike this balance and the challenges it is facing.

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[1] Kaplan, Andreas M., and Michael Haenlein. "Users of the world, unite! The challenges and opportunities of social media." *Business horizons* 53.1 (2010): 59-68.

[2] Robert C. "The social foundations of defamation law: Reputation and the constitution." *California Law Review* 74.3 (1986): 691-742.

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These dynamics are thus crucial for both the individual reputation and the broader principles of free expression in the digital era.

OVERVIEW OF SOCIAL MEDIA'S INFLUENCE ON COMMUNICATION AND REPUTATION

Social media has revolutionized human communication, information sharing, and reputation formation. Indeed, social media, primarily driven by Facebook, Twitter, and Instagram, serves to democratize speech.[3] Anybody with an internet connection can broadcast his or her thoughts to billions of people across the world. Naturally, this profoundly alters the impact that social media has on one's personal and professional reputation.

On one hand, social media adds value to reputation through the sharing of achievements, opinions, and expertise. On the other hand, it may become a double-edged sword, as false or malicious statements are spread out very easily, causing severe harm to the reputation of an individual or an organization. Due to their characteristics, the speed and reach of information in these platforms cause a much larger impact of both positive and negative speech, hence making the legal landscape about defamation complicated and nuanced.

Furthermore, the algorithms used in these social media platforms exacerbate the spread of defamatory content. Algorithms are targeted towards what brings more engagement, so the controversial or bombarding information will be shared and highlighted more, even if not true. That makes it much harder to control the effects and tone down the statement of defamation online.[4]

IMPORTANCE OF BALANCING FREE SPEECH AND REPUTATION IN ONLINE PLATFORMS

In the context of social media, free speech and reputation protection represent a balance of keen sensitivity. Free speech stands to be a right flowing from, inter alia, the Constitution of India, without which democracy cannot really exist; hence, it is an excellent opportunity for one to express their views, be part of public discourse, and hold the mighty accountable.[5]

However, the right to free speech is not absolute. When speech tips over into defamation, it unjustly harms an individual's reputation, livelihood, and mental well-being.[6] The laws of defamation protect individuals from such harm, which should enable freedom of expression without becoming a tool for character assassination.[7] The problem is particularly severe in the online realm, where the lines between public and private speech are usually blurred. In addition, because digital content is durable, its impact may be lasting. Against this background, the present paper pursues the following aims: an analysis of free speech against defamation on social media, with special reference to the intricacies of these legal standards in India, case laws, and examples that give the view of how the battle remains waged to maintain this equilibrium between free speech and defamation.

In an international perspective, there are good insights into some of these challenges. For example, the European Court of Human Rights has made very significant pronouncements in landmark decisions on the need to seek a delicate balance between, on one hand, protection of individuals' reputations and, on the other hand, safeguarding free speech, considering that "freedom of expression constitutes one of the essential foundations of a democratic society" while at the same time recognizing the need to also protect others from unjust harm to

[3] Boyd, Danah M., and Nicole B. Ellison. "Social network sites: Definition, history, and scholarship." *Journal of Computer-Mediated Communication* 13.1 (2007): 210-230.
[4] Smith, J. & Jones, A. (2020). Defamation in the Digital Age: Social Media Challenges and Opportunities. Journal of Media Law and Ethics, 15(2), 98-112.
[5] Basu, Durga Das. *Introduction to the Constitution of India*. LexisNexis Butterworths Wadhwa Nagpur, 2012.
[6] Smith, J. (2021). Balancing free speech and reputation in the digital age. International Journal of Law and Information Technology. Retrieved from International Journal of Law and Information Technology.
[7] Post, Robert C. "The social foundations of defamation law: Reputation and the constitution." *California Law Review* 74.3 (1986): 691-742.

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their reputation. The United States, similarly, has developed a quite substantial body of case law around the First Amendment, in which its courts have attempted to draw a balance between free speech and defamation—especially those related to public figures and matters of public interest.[8]

LEGAL FRAMEWORK: FREE SPEECH AND DEFAMATION IN INDIA

Within the labyrinth of Indian law lies a dynamic yet precarious balance between free speech and reputation protection.[9] This article attempts to throw light on the way such balance is being tested in an ever-changing landscape of digital platforms that are throwing unique challenges at the legal frameworks in India.

Constitutional Backdrop

At the root of the controversy are two pivotal constitutional provisions: Article 19(1)(a) and Article 21. Article 19(1)(a) of the Indian Constitution guarantees this right, bestowing it upon every citizen as an inherent component of democratic life. This right, however, is not unlimited; it is circumscribed by Article 19(2), which enables the state to bring in reasonable restrictions for a variety of causes including public order, decency, and, most crucially, defamation. Running parallel to this is Article 21, which guarantees the right to life and personal liberty. Indian law has developed to interpret this right in widest amplitude, including the right to reputation as an inalienable part of personal liberty.[10]This construction lays the requisite emphasis on the exercise of free speech vis-a-vis the reputation of another.[11]

Statutory Landscape

The statutory provisions dealing with defamation are embodied mainly in Sections 499 and 500 of the Indian Penal Code (IPC). Section 499 defines the term defamation and lays down the exceptions under which an expression can be treated as defamatory. This section also enlists certain exceptions where truth, spoken for public good, shields a speaker from defamation charges. Section 500 further tells us what the punishment for defamation is: it defines it to be punishable with a fine and may extend to two years of imprisonment.[12] Furthermore, it has been a critical piece of legislation in addressing the nuances of digital defamation. As the infamous Section 66A of the IT Act has been stricken out by the Supreme Court in 2015, stating that it is vague and has the potential to gag free speech, other provisions of the said Act, notably Section 67,[13] which penalizes the publishing of obscene material on the Internet, continue to loom large over online discussion.

Comparative Perspectives

Internationally, there are very varying balances between free speech and defamation. For instance, in the United States, there is the establishment, with the case of New York Times Co. v. Sullivan[14], of the "actual malice" standard for cases of defamation of public figures; hence, great protection of free speech. European jurisdictions tend to emphasize the protection of individual reputations more than others. The European Court of Human Rights, for instance, in the case of Delfi AS v. Estonia, has maintained that there must be a balance between freedom of expression and the protection of individual reputation, especially in online media.

CHALLENGES IN DEFINING DEFAMATION IN THE DIGITAL AGE

Defining defamation in this rapidly changing digital communication world, most especially on social media, has several unprecedented challenges. The very nature of these online platforms and the globe-spanning reach of the internet smashes headlong into traditional standards of defamation, making it a tricky issue in both understanding and enforcement.

[8] Johnson, L. (2019). Balancing Free Speech and Reputation in the Digital Age. International Journal of Law and Information Technology, 27(1), 45-62.
[9] Narayan, S. "Freedom of Speech and Expression: A Comparative Study of Indian and US Judiciary." *Journal of Indian Law & Society* 3.1 (2010): 155-182.
[10]Basu, Durga Das. *Introduction to the Constitution of India*. LexisNexis ButterworthsWadhwa Nagpur, 2012.
[11] Singh, Pritam. "Right to Reputation in India: Need for Legislative Response." *Indian Journal of Legal Studies* 6 (2018): 22-34.
[12] Lal, Ratan, and Dhiraj Lal. *The Indian Penal Code*. 34th ed., LexisNexis Butterworths, 2014.
[13]Jayal, Niraja Gopal, and PratapBhanu Mehta. *The Oxford Companion to Politics in India*. Oxford University Press, 2010
[14] Smith, J. & Jones, A. (2020). Defamation in the Digital Age: Social Media Challenges and Opportunities. Journal of Media Law and Ethics, 15(2), 98-112.

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Attributes of Social Media Platforms

Social media platforms, by their very nature, facilitate speedy and widespread dissemination of information. The immediacy coupled with enormous reach and the permission for anonymity or the use of fictitious identities make the availability of defamatory content viral and often out of control.[15] Unlike conventional media, where editorial checks are standard, on social media, most of the content uploaded is user-generated and, in most cases, without any filters or proper fact-checking.

These platforms also tend to, in a good number of instances, archive information indefinitely, thus making any reputational harm not just more serious but also eternal.[16] Beyond that, the algorithms adopted on these platforms tend to propel content that sparks up engagement, which sometimes might even be instigated by controversial and defamatory comments.[17] This feature is often the reason for the rapidity and extensiveness of such damaging content, further diminishing one's ability to contain defamation after it has happened.

Global vs. Local Standards: Implications for Cross-Border Communication

One of the principal challenges in regulating defamation on social media is the imposition of local laws across a global space. Social media knows no geographic or jurisdictional lines. The kind of information that may result in defamation in one country does not necessarily have the same implication in another country.[18] This difference can present problems in legal and enforcement predicaments, especially in cross-border communication cases.

The definitions and legal protections regarding defamation are quite variable from one country to another. At one extreme, some nations have tough anti-defamation laws with severe punishment, while at the other extreme, they promote freedom of speech in place of assuring some speech that can even be harmful or offensive.[19] This variability is a significant problem for social media sites, which must also negotiate these variously diverse legal regimes in their attempts to apply uniform community standards worldwide.

Indeed, things are further complicated when national defamation rulings are exported to other jurisdictions. As a matter of recourse, it would ultimately depend on the laws of those countries so as to provide such remedies, which may not recognize or enforce a defamation action from a foreign jurisdiction. This is the point in this situation that it often finds victims of defamation in a rather clear way of remedying the situation especially if the suspect is way beyond one's jurisdiction.

Moving Forward

Defamation in the digital age should be tackled through revised legal perceptions with international standards or agreements that might make it easier with more consistency in treating defamation among different nations.[20] There is an increased plea for the need to have improved and responsive mechanisms within social media platforms that would handle defamatory content decisively in a proactive way.

Ultimately, this presents various challenges in defining and regulating defamation in the digital sphere, as has been the case of adequate legal systems fitting into global digital communication realities.[21] Adaptations would

[15] Boyd, Danah M., and Nicole B. Ellison. "Social network sites: Definition, history, and scholarship." *Journal of Computer-Mediated Communication* 13.1 (2007): 210-230.
[16] Davis, F. (2020). Navigating defamation in the age of social media: Legal challenges and remedies. Journal of Internet Law, 23(4), 10-25. Retrieved from Journal of Internet Law.
[17] Solove, Daniel J. *The Future of Reputation: Gossip, Rumor, and Privacy on the Internet*. Yale University Press, 2007.
[18]Reidenberg, Joel R. "States and Internet enforcement." *University of Ottawa Law & Technology Journal* 1.1 (2003): 213-229.
[19] Brown, A. (2020). Freedom of speech vs. defamation on social media: A comparative study. Harvard Law Review, 133(2), 456-489. Retrieved from Harvard Law Review.
[20] Adams, P. & Clark, J. (2019). Defamation Law and Digital Communication: Current Issues and Future Directions. Computer Law & Security Review, 35(4), 425-440.
[21] Solove, Daniel J. *The Future of Reputation: Gossip, Rumor, and Privacy on the Internet*. Yale University Press, 2007.

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need to balance the protection of individual reputations with principles of free expression, in keeping with the complex interplay of rights that an increasingly digital age demands.[22]

JUDICIAL INTERPRETATIONS OF FREE SPEECH AND DEFAMATION IN INDIA

The fine balance between free speech and defamation in India, through judicial interpretation, has been made by landmark decisions that have come through time to time, enabling the judiciary to capture a nuanced comprehension of evolving communication landscapes. Important cases such as Subramanian Swamy v. Union of India and Shreya Singhal v. Union of India have thrown remarkable light on how defamation is perceived and legislated inside the country.

Subramanian Swamy v. Union of India[23]

This is a landmark case dealing with the legality of criminal defamation under Sections 499 and 500 of the Indian Penal Code. The Supreme Court upheld them, stating that the right to reputation is intrinsic to the right to life under Article 21 of the Constitution. By upholding the constitutionality of criminal defamation, the Supreme Court reaffirmed that the right to live with dignity and reputation of an individual does not eclipse an individual's right to freedom of speech under a reasonable restriction.

Shreya Singhal v. Union of India[24]

In sharp contrast, the Shreya Singhal case is a welcome departure toward securing online expression. In this case, the Hon'ble Supreme Court struck down Section 66A of the Information Technology Act, under which, among other things, sending 'offensive' messages over the Internet was an offence. The court held the vague and overly broad language in the section had a chill on legitimate free speech; hence, it was unconstitutional. Such a ruling is monumental in the fight for digital rights and freedom of expression online.

Balancing Between Rights

Such court decisions demonstrate the thin line that exists between protecting reputational rights and protecting free speech. While Subramanian Swamy v. Union of India reinforces the protection to be provided against libellous attacks on individuals, Shreya Singhal v. Union of India protects the prestige of the principle of freedom of speech from being used to suppress genuine expression.[25]

Comparative Perspectives

Judicial methods in India can also be compared with jurisdictions elsewhere. For instance, in the case of Lingens v. Austria[26], the European Court of Human Rights not only pointed out the importance of freedom of expression but also took a balanced view in protecting reputational rights. The United States Supreme Court grappled with the issue in the landmark case of balancing protection for public figures against defamation and guaranteeing free speech in Hustler Magazine v. Falwell.[27]

Continuation of Dialogue

The two judgments have certainly brought upon new dimensions out of the courtroom, which are still emerging into wide existence in legal, social, and digital domains in India. These guide legal practitioners, policymakers, and the public on the permissible limits of speech and protections against defamation.[28] As digital communication burgeons, these judicial pronouncements will continue to be of critical importance in shaping the debate over free speech and defamation within India's vigorous democratic setup.

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[22] Williams, D. (2022). Defamation law and digital communication: Current issues and future directions. Computer Law & Security Review, 38(1), 45-62. Retrieved from Computer Law & Security Review.
[23]Subramanian Swamy v. Union of India, *(2016) 7 SCC 221*
[24] Shreya Singhal v. Union of India, (2015) 5 SCC 1.
[25] Rao, SidharthLuthra. "The Balancing Act: Free Speech and Criminal Defamation." *The Indian Journal of Constitutional Law* 9.1 (2016): 1-13.
[26] European Court of Human Rights. (1986). Case of*Lingens v. Austria.*
[27] U.S. Supreme Court. (1988). Hustler Magazine v. Falwell. 485 U.S. 46.
[28]Basu, Durga Das. *Introduction to the Constitution of India*. LexisNexis ButterworthsWadhwa Nagpur, 2012.

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CURRENT ISSUES AND TRENDS IN DEFAMATION

As digital communications become omnipresent, defamation law begins to experience challenges and new changes. The dynamic scenario is currently being carved through emerging difficulties in enforcing the laws online and shifting trends in defamation litigation,[29] while following the cases in the courts.

Emerging Challenges in Enforcing Defamation Laws Online

Online Implementing online defamation laws is challenging:

- *Anonymity of Users:* When the users are able to create anonymous or pseudonymous profiles, it is difficult to finger people behind defamatory content.[30]
- *Jurisdictional Issues:* The very nature of the internet enables defamatory content to be circulated globally, thereby making a mess out of enforcing local defamation laws.
- *Rapid Spread of Information:* Once the defamatory content has been put online,[31] it has the ability to go viral in just a few minutes and makes controlling or curbing its spread an almost impossible action.

These challenges must lead to the adaptation of legal systems with new arrangements in enforcement; even international legal bodies can be included, together with technology firms, in attempts to track and effectively handle harmful content.

Trends in Defamation Litigation: Insights from Recent Cases

Several trends in defamation litigation have been exemplified in the recent cases:

- *More Attention to Social Media Platforms:* Courts are increasingly holding the feet of social media platforms to the fire with responsibility for content on their sites, so discussions of the burdens of these platforms in moderating content are under way.
- *Libel tourism*: There is an increasing trend in plaintiffs choosing to file defamation suits[32] in jurisdictions perceived to be more favorable to free speech.
- *Anti-SLAPP (Strategic Lawsuit Against Public Participation) Laws:* Where they exist, more anti-SLAPP laws[33] in multiple jurisdictions across the country have been employed to protect defendants from cases designed to censor, intimidate, or silence critics through the imposition of the cost of legal defense.

Such trends reflect this broader recognition of the complexity in characterizing something as defamatory in the digital age. And not only do courts require interpretation of traditional laws relating to defamation, they also must consider how this law will apply to new technologies and modes of communication.

CELEBRITIES AND DEFAMATION: NAVIGATING LEGAL CHALLENGES IN THE DIGITAL AGE

The rise of social media has transformed how celebrities engage with the public, but it has also exposed them to increased risks of defamation.[34] High-profile defamation cases involving celebrities like Salman Khan and Amitabh Bachchan shed light on the complex interplay between public persona management and legal recourse. These cases are pivotal in understanding how defamation laws are applied in the age of digital communication.

[29] Smith, J. & Jones, A. (2020). Defamation in the Digital Age: Social Media Challenges and Opportunities. Journal of Media Law and Ethics, 15(2), 98-112.
[30] Solove, Daniel J. *The Future of Reputation: Gossip, Rumor, and Privacy on the Internet*. Yale University Press, 2007.
[31] Kaplan, Andreas M., and Michael Haenlein. "Users of the world, unite! The challenges and opportunities of social media." *Business Horizons* 53.1 (2010): 59-68.
[32] Price, Monroe E. "Libel tourism." *Communication Law and Policy* 18.4 (2013): 423-449.
[33]Pring, George W., and Penelope Canan. *SLAPPs: Getting Sued for Speaking Out*. Temple University Press, 1996.
[34] Doe, J. (2022). Defamation in the digital age: Social media challenges and opportunities. Journal of Media Law and Ethics. Retrieved from Journal of Media Law and Ethics.

Salman Khan vs. Times Now[35]

Salman Khan's legal battle with Times Now underscores the sensitivity of media reporting on celebrities. The case centred around defamatory content that was broadcasted, highlighting the significant influence media outlets have on a celebrity's public image and the legal boundaries they must navigate when reporting on high-profile individuals.

Amitabh Bachchan vs. Facebook User[36]

Amitabh Bachchan' s dispute with a Facebook user over slanderous comments illustrates the challenges celebrities face on social media platforms, where defamatory remarks can quickly spiral out of control. This case emphasized the personal responsibility of social media users to manage the content they share and showcased the legal mechanisms celebrities can employ to protect their reputations online.

Broader Implications and Other Notable Cases

Other celebrities, such as Deepika Padukone[37] and international star Taylor Swift[38], have also engaged in legal actions to defend their reputations. These instances highlight a growing trend where public figures actively confront defamatory statements to safeguard their personal and professional standings.

The legal battles across various platforms reflect the ongoing challenges and necessary adaptations within defamation law to address the unique dynamics of the digital era. For celebrities, these cases reinforce the importance of vigilance and proactive legal strategies to manage their public personas in an increasingly interconnected world. The outcomes of such cases continue to shape the legal landscape, informing both public figures and the general public about the boundaries of acceptable discourse in the digital age.

REGULATORY RESPONSES AND POLICY CONSIDERATIONS IN DEFAMATION

In the age of digital platforms, which define and dominate communication, effective handling of defamation demands strong regulatory response and policy frameworks that can keep changing. India, with its rich legal heritage, on the one hand, and the rising digital landscape, on the other, deals with twin challenges[39]—reforming conventional defamation laws and self-regulating social media networks.

Efforts to Amend Defamation Laws in India

Section 499 and Section 500 of the Indian Penal Code allow for criminal prosecution under the defamation laws of India. These are being criticized for a long time due to their potential of stalling free speech,[40] but these sections provide for making defamation a criminal act, which is a very draconian method used against free speech across the globe. Recent legislative efforts to decriminalize defamation and shift legal redress to civil penalties, which are seen as less restrictive of freedom, have nonetheless been helpful.

But the call for reform, therefore, goes further than reducing the penalties; it looks to make the laws themselves more in tune with the nuances of digital communication. Pro-reform constituents, in turn, demand clearer definitions, including taking into account the intent and impact on potentially defamatory statements on the Internet. It is said that spread is now so quick that the damage could be instant.[41] These amendments balance the need to protect personal reputations with the imperative to maintain the democratic ideals of free expression.

[35] "Salman Khan wins defamation case against TV channel." *The Times of India*, 10 July 2017.
[36] Singh, Shweta. "Amitabh Bachchan wins defamation case against Facebook user." *Hindustan Times*, 22 March 2018.
[37] Bhardwaj, Ashutosh. "DeepikaPadukone files defamation case against tabloid." *The Indian Express*, 5 January 2016.
[38] BBC News. "Taylor Swift wins defamation case against DJ." *BBC*, 14 August 2017.
[39] Post, Robert C. "The social foundations of defamation law: Reputation and the constitution." *California Law Review* 74.3 (1986): 691-742.
[40] Lal, Ratan, and Dhiraj Lal. The Indian Penal Code. 34th ed., LexisNexis Butterworths, 2014.
[41]Nariman, Fali S. "Freedom of Speech and Expression: Some Recent Developments." Supreme Court Cases (2009): 50-60.

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Role of Self-Regulation and Social Media Policies in Addressing Defamation

On another front, social media sites are taken today as vital stakeholders in the battle against defamation. As a matter of fact, Facebook, Twitter, and Instagram have all come up with elaborate community standards and policies that categorically cater to policies that bar users from posting content that is defamatory in nature.[42] Policies further go ahead to explain the available reporting avenues in regard to defamation claims and also explaining moderation procedures that check on adherence to set out guidelines in the community standards and local laws.

These platforms face the twin challenge of being global entities and, at the same time, locally embedded actors.[43] They have to work through different legal landscapes with its own tensions and yet keep at least a generally acceptable standard of behavior globally on their platforms.[44] The fact that such policies are constantly in flux is really the perfect illustration of the tangled dance between user freedom and responsibility, with the significance of platform governance in shaping public conversations.

CONCLUSION

As India steps into the digital world, her defamation laws illuminate a serpentine alley of challenges and opportunities.[45] Therefore, the necessary nuances required in the legal framework are immense: balancing the protection of personal reputation with principles of free speech.

The most significant issues to modernize defamation laws involve the concern of rapid dissemination of potentially harmful content online as well as jurisdictional challenges created by the global nature of the internet. The anonymity made possible by digital platforms complicates enforcement of conventional defamation laws and calls for creative legal solutions.[46]

But also in these challenges lie the possibilities. The digital era offers an enormous scope for reforming the regulation and the defamation laws of today in order to have better conduct with contemporary communication realities. Furthermore, there might be more precise legal definitions for defamation, and a change from criminal to civil remedies, thereby reducing the misuse of laws for suppression of free speech.

Recommendations for Enhancing Legal Framework in the Digital Era

1. Decriminalize Defamation: Move from criminal to civil defamation so as to avoid the risks that the defamation laws could become a tool of suppression but provide remedy to genuinely harmed individuals.

2. Clarify Legal Definitions: Modernization of legal definitions of defamation to reflect the nuances of digital communication and, thereby, provide a better basis for determining what exactly constitutes harm in the digital age, could focus on criteria for intent and actual damage caused.

3. Strengthen Self-Regulation: Encouraging and formalizing the role of self-regulation by social media platforms can increase the speed with which resolution on defamation cases is arrived at. Platforms need to be incentivized to create mechanisms—transparent, fair, and efficient—to handle claims of defamation.

[42] Green, B. (2019). The evolving landscape of defamation law in the context of social media. Yale Journal of Law & Technology, 21(1), 78-105. Retrieved from Yale Journal of Law & Technology.
[43] Goldman, E. (2021). An Overview of the United States' Section 230 Internet Immunity. The Oxford Handbook of Online Intermediary Liability. Oxford University Press.
[44]Kietzmann, Jan H., et al. "Social media? Get serious! Understanding the functional building blocks of social media." *Business Horizons* 54.3 (2011): 241-251.
[45] Post, Robert C. "The social foundations of defamation law: Reputation and the constitution." *California Law Review* 74.3 (1986): 691-742.
[46] Solove, Daniel J. *The Future of Reputation: Gossip, Rumor, and Privacy on the Internet*. Yale University Press, 2007.

4. Increase International Cooperation: Online communication is borderless and jurisdictional issues cannot be solved effectively without international cooperation. Work towards international standards and agreements on how to treat online defamation can best take care of jurisdictional challenges.

5. Promote Digital Literacy: Public education on what amount of impact online behavior poses—like even an act of defamation can have possible legal implications—is key. The more people know, the level of defamation could be lower, leading to a more respectful digital conversation.

By implementing the aforesaid suggestions, it is feasible that India can craft a formidably flexible and robust legal approach with regard to defamation that may save the reputations of people without causing any harm to the democratic value of free speech in a democratic society; hence, and then we can expect an online public square that is healthy, vibrant.

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LEGAL FOCUS AND LOOPHOLES: WILL ETHICAL HACKING SERVE AS A SAVIOR TO CORPORATE DATA BREACH

Tamasi Biswas*

Abstract

In the era of Industry 4.0, with discussions already surfacing about the advent of Industry 5.0, society finds itself at a critical juncture. There exists a complex debate surrounding the use of AI tools for efficient work while simultaneously ensuring complete responsibility for data confidentiality and security. In this pivotal phase of industrial and technological integration, it is imperative to adopt a structured framework that incorporates ethical hacking across all business sectors. Implementing ethical hacking practices will enhance security intelligence, creating a safer corporate environment and fostering economic liberalization. Against this backdrop, this study aims to establish a legal framework that governs the ethical hacking mechanism to achieve heightened data security. Protecting classified information, securing economic transactions, and ensuring client communication and privacy will be central to this research. The primary objective of this work is to raise awareness among businesses about potential technological threats and to cultivate a tech-ready culture capable of addressing data security risks. Building a team of skilled ethical hackers will play a crucial role in safeguarding virtual data spaces and mitigating cyber risks effectively.

***Keywords: Ethical Hacking, Data Security, Data Confidentiality, Corporate Data Breach, Economic liberalization with tech-innovation*.**

INTRODUCTION

With the looming advent of Industry 5.0, the integration of technological advancement into business operations has become a pivotal aspect of economic growth and competitiveness. However, this paradigm shift has also given rise to a "donnybrook complex," a term referring to the intricate challenges associated with leveraging AI tools while simultaneously ensuring data confidentiality and prudence.[1] As businesses navigate this intricate landscape, the need for a comprehensive framework that embraces ethical hacking practices has emerged as a critical imperative. Ethical hacking, a practice that involves legally authorized attempts to breach secure systems to identify vulnerabilities, has the potential to fortify security intelligence and foster a safer environment for economic liberalization.[2] With the implementation of ethical hacking guidelines and intelligence, businesses try to probe into a security system with the motive to further enhance scrutiny. It ensures that businesses can protect their sealed information, as well as guard client privacy and maintain the integrity of economic and client communications by actively identifying and mitigating such potential risks. It is not a long while, we all, more or less, were threatened with the fact that a blooming Company, namely Boat, suffered data breach which exposed personal data of nearly 7.5 million users' information which was left unattended on dark web, with mere clue on to what extent may the negative repercussions be on the company and on its client. This is mere due to security loopholes. Circumstances, with facts and figures has actually come down to the fact that our policing is far weaker than our thieves. And therefore, to make a level playing field, the study proposes an ethical hacking guideline in the form of a legislation which will ensure that our cyber police force or data security officers are steps ahead than the dark web hackers.

Literature Review

Ethical hacking or penetration testing (Pen-testing) has evolved as a critical practice in big giant business ventures to address vulnerabilities as regards to confidential information systems and networks. This section

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[1] Sharma, P. K., Navditti, A., Kumari, A., Sangaiah, A. K., & Sarkar, S. (2021). Ethical hacking and its role in cyber security. In Cyber Security and Ethical Hacking (pp. 1-17). CRC Press. https://doi.org/10.1201/9781003167151-1.

[2] Rao, U. H., &Nayak, U. (2014). The InfoSec handbook: An introduction to information security. Apress. https://doi.org/10.1007/978-1-4302-6383-8.

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synthesizes existing research on the channelized utility of ethical hacking in business corporations, examining the legal and ethical considerations.

According to Jones (2019), ethical hacking serves as a proactive defense mechanism, allowing organizations to stay one step ahead of cyber threats. By simulating real-world cyber-attacks, ethical hackers help businesses identify weaknesses in their networks, applications, and infrastructure, thereby enabling them to strengthen their defenses.[3]

Numerous studies have highlighted the benefits of ethical hacking for business corporations.

According to Gupta et al. (2020), ethical hacking enables organizations to assess their security controls objectively and identify gaps that could compromise their data integrity and confidentiality.[4] Moreover, ethical hacking helps in compliance with regulatory requirements by ensuring that security measures meet industry standards and best practices (Parker, 2018).[5] Additionally, ethical hacking fosters a culture of security awareness within organizations, empowering employees to recognize and report potential security threats (Ferguson, 2021).[6]

Research Gap

Ethical hacking though quiet beneficial for the business to evolve, we cannot overlook the ethical considerations and legal challenges it poses. One of the primary challenges is the potential for legal and ethical dilemmas, particularly concerning the scope of testing and the impact on third-party systems.[7] Moreover, ethical hackers must adhere to strict codes of conduct and ethical guidelines to ensure responsible and lawful conduct throughout the testing process.[8] Therefore the problem now stands as to the factor of balancing the need for a thorough security assessments within the organization keeping in mind the respect for user privacy. Data protection, so does possess an ongoing challenge for ethical hacking practitioners.

Another important aspects of consideration, at the backdrop of Indian Business setting is that as and when a giant corporation faces data breach issue, it is somehow possible for them to mitigate the risk through proper planning since giant corporations do maintain the level of scrutiny required for risk mitigation. But, it becomes a matter of concern for the small corporates, who are just rising into that marginal level of success in this competitive genre and when at such circumstances such corporate faces data breach, it becomes highly risky to revive back into its place of ease wherefrom they wished to touch success.

Research Objectives

The study in hand would like to focus and draw attention of the readers in the following space:

a. To analyze the existing legal framework governing ethical hacking practices and thereby studying its efficacy in mitigating cyber risks while ensuring data security within business establishments.

b. To propose a comprehensive and adaptable framework that integrates ethical hacking practices, fostering a proactive approach to data security while maintaining client privacy and economic liberalization.

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[3] Jones, M. (2019). Leveraging Ethical Hacking for Proactive Cybersecurity Defense. Journal of Cybersecurity Management, 6(1), 45-58.

[4] Gupta, S., et al. (2020). Enhancing Cybersecurity Through Ethical Hacking: A Case Study of Business Corporations. International Journal of Information Security, 15(4), 321-335.

[5] Parker, E. (2018). Regulatory Compliance and Ethical Hacking: Ensuring Security in Business Corporations. Journal of Corporate Governance, 12(3), 189-204.

[6] Ferguson, T. (2021). The Role of Ethical Hacking in Strengthening Cybersecurity Awareness. Journal of Information Security, 8(2), 89-102.

[7] Kumar, A., &Bhushan, B. (2019). Legal and Ethical Issues in Ethical Hacking: A Comprehensive Review. International Journal of Cyber Ethics in Education, 9(2), 1-15.

[8] Jain, A., & Gupta, R. (2021). Ethical Considerations in Penetration Testing: A Review of Current Practices. Journal of Computer Ethics, 17(3), 201-216.

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Research Questions

a. Whether the existing legislations are equipped to handle the changing cyber threats and data security issues that businesses are grappling with in the age of Industry 4.0 and, beyond?

b. Whether incorporating hacking techniques into business practices notably boost data security protect client confidentiality and encourage economic growth all while reducing potential cyber threats?

LEGISLATIVE STEPS:

Ethical hacking, also called penetration testing is an important means of preventing possible cybersecurity threats. It calls for the practice of a virtual cyber-attack on a computer system to detect vulnerabilities that can be exploited. Pen test can be carried out through different approaches, for instance, external, internal, blind, double blind and the targeted testing. These methods normally consist of pinpointing and utilizing security vulnerabilities in a controlled and risk-free environment. On the other hand, Penetration testing is recognized and prohibited in some countries while it is encouraged and facilitated in others. Illegitimate penetration testing may lead to very serious legal issues such as fines, imprisonment, and deportation of foreign nationals. Stakeholders must have the knowledge of the legal and regulatory frameworks of penetration testing to avoid legal exposure and ensure their cybersecurity activities comply with the relevant laws and regulations.

Countries where penetration test is considered heavily regulated includes Germany, the UK, India, Singapore, US, Japan, Canada, and Australia. In Germany, penetration testing is governed by the German Criminal Code and the German Federal Data Protection Act, thus consent of the IT infrastructure owner is must. The Computer Misuse Act was put in place in 1990 to govern legal access to computer data; this piece of legislation bars unauthorized entry to data and changing stored information without permission from the owner.

In India, before carrying out a penetration test, the manager has to take the consent from the management and have to perform the test within the proper limits. Herein, the broaderlegal and regulatory framework of penetration testing are governed by the IT Act, the IPC, certain RBI guidelines, the National Cyber Security Policy, and Payment Card Industry Data Security Standards. However, in a close observation we will be able to recognize that this standard is solely sector oriented and none of this actually ensure data confidentiality of bigger databases. The legal terrain of penetration testing is of essence to both persons and entities who want to be sure that their cybersecurity policies follow the applicable legislation and regulation. And this is the need of the hour.

DATA CONFIDENTIALITY ISSUES IN BIGGER DATABASES IN CORPORATIONS

Data confidentiality is crucial to build market capacity and trustworthiness for corporations which usually deals with large databases fed with sensitive information which are likely to evade consumer privacy. Ensuring confidentiality of a dataset is therefore the penultimate task before any form of agency trading in goods or service for protecting the privacy of individuals, safeguarding corporate interests, and complying with regulatory requirements, and in turn building customer confidence in their end product or service. If that standard is not met then, it would be highly difficult to sustain business growth. On the quiet contrary, if it is only that the giant corporations can ensure this degree of confidentiality and others small business are not equipped with such ethical measures then, this will also result in accumulation of power of the giant corporates and undervalue small companies. This will, in turn, take us back to square one where we will again be fighting with monopoly and competitive practices will again be the dream of the nation.

As the volume of data collected and stored by corporations continues to grow, the risk of data breaches and unauthorized access to confidential information increases.[9] Large databases often contain personal information, financial records, trade secrets, and other sensitive data, making them prime targets for cyber attackers and

[9] Srinivasan, S., &Erramilli, V. (2019). Data confidentiality: Issues and challenges in big data security. International Journal of Innovative Technology and Exploring Engineering, 8(7), 1-5. https://doi.org/10.35940/ijitee.G5460.0585C19.

malicious insiders. A single data breach can have severe consequences, including financial losses, legal liabilities, and reputational damage.[10]

Ensuring data confidentiality in larger databases requires a multi-layered approach that addresses both technical and organizational aspects. From a technical perspective, robust access controls, encryption, and security monitoring systems are essential.[11]Access controls limit access to sensitive data only to authorized personnel, while encryption protects data from unauthorized access during transmission and storage. Security monitoring systems help detect and respond to potential threats in real-time.

However, it's not, about the stuff. Organizational rules and procedures like sorting out data and how to handle it training employees and having plans for when things go wrong all play a role in keeping data. Sorting data helps make sure that important info is recognized and kept safe while training staff helps them understand the ways to handle data and what risks to look out for. Also companies need to follow rules and standards, about keeping data safe like the General Data Protection Regulation (GDPR) and the Health Insurance Portability and Accountability Act (HIPAA). If they don't follow these rules they could face fines and legal trouble. Dealing with keeping data safe in databases needs an approach that includes using tech tools following organizational rules training staff properly and sticking to regulations. Doing checks for risks auditing security measures always trying to make things better are all important to keep up with new threats and protect sensitive information.

LEGISLATIVE LOOPHOLES

The emergence of Industry 4.0 and the rapid adoption of digital technologies have brought about unprecedented cyber threats and data security challenges for businesses, particularly in India. While the country has made strides in developing a regulatory framework to address these concerns, the existing legislations may not be fully equipped to keep pace with the ever-evolving cyber landscape.

One of the primary legislations in India addressing data protection and privacy is the Information Technology Act, 2000 (IT Act). This act provides provisions for dealing with cybercrime and electronic commerce, including penalties for unauthorized access, data theft, and cyber terrorism (Ministry of Electronics and Information Technology, 2000). However, the IT Act has faced criticism for its narrow scope and lack of comprehensive data protection regulations.[12] And such narrow scope is unable to provide us facilities for making ethical hacking or penetration testing with ease. This leaves the corporate with the sole choice of making contractual agreement every time it gets ready for an ethical hacking initiative, making it expensive and a quite elongated procedure.

The need for a dedicated data protection law was recognized, leading to the drafting of the Personal Data Protection Bill (PDP Bill) in 2019. The PDP Bill aims to establish a robust framework for data protection, including provisions for data localization, consent requirements, and the establishment of a Data Protection Authority.[13] However, the bill has been subject to numerous delays and is yet to be enacted into law.

The absence of a comprehensive data protection law has left businesses vulnerable to data breaches and cyber threats. In recent years, India has witnessed several high-profile data breaches, such as the Jio data breach in

[10]Radziwill, N. (2018). Cyber-attack risk: Data confidentiality, integrity, and availability. The Software Quality Professional, 20(4), 25-35.

[11] Hu, V. C., Ferraiolo, D. F., & Kuhn, D. R. (2019). Assessment of access control systems. NIST Interagency/Internal Report (NISTIR) - 7657r2. https://doi.org/10.6028/NIST.IR.7657r2

[12]Venugopal, P., &Babu, R. (2022). Data protection and privacy laws in India: Challenges and way forward. Journal of Cyber Policy, 7(1), 1-24. https://doi.org/10.1080/23738871.2021.1974284.

[13] Sharma, S., Jain, R., & Singh, N. (2022). Data protection laws in the age of Industry 4.0: A comparative analysis of India and the European Union. International Journal of Information Management Data Insights, 2(2), 100077. https://doi.org/10.1016/j.jjimei.2022.100077.

2019, where the personal information of over 120 million subscribers was exposed.[14] Another notable incident was the Air India data breach in 2021, compromising the data of millions of customers.[15]

These incidents underline the need for more stringent enforcement and tougher penalties against data breaches. Even though IT Act provides for penalties against unauthorized access and theft of data, the fines and terms of imprisonment may not be commensurate with the magnitude and impact of large-scale data breaches. There are, moreover, some new challenges that come with Industry 4.0 such as Internet of Things (IoT) and Industrial Control Systems (ICS) that have been ignored in previous laws. The absence of specific legislations on these technologies could expose firms to cyber threats that target them. In order to respond to these concerns, it is crucial for India to expedite a passing of the PDP Bill at the same time as remaining attentive about being current with their regulative framework as the technologies continue growing. Furthermore, businesses are required to increase their awareness and knowledge capacities in order to support stronger cyber security precautions as well as data protection methods. Although Indian rules outlining cyber threats and data security are enforced, they may not be adequate to counter emerging hazards due to Industry 4.0 and the high rate of transformations in the digital world. Hence, it is essential to implement the PDP Bill and consistently evaluate the current laws in order to safeguard the operation of businesses in the digital era.

SOME ETHICAL HACKING SCOPES

In March 2022, Pegasus Airlines experienced a significant breach of the Turkish Law on the Protection of Personal Data (LPPD), resulting in the exposure of 23 million files on an AWS S3 bucket. The data, which included flight charts, navigation materials, crew PII, and software source code, could have affected thousands of passengers and flight crew. The breach was primarily caused by employee negligence and human error, as the company's system administrator failed to properly configure the cloud environment, leaving sensitive data without password protection. The company should have had the foresight to monitor user interactions with sensitive systems and data, as privileged users have access to critical IT infrastructure and resources.[16]

Such an incident reiterated on May 2023, a German news outlet obtained Tesla's confidential information, revealing that two former employees misappropriated it in violation of company IT security and data protection policies. The newspaper received over 23,000 internal documents, including employee PII, customer financial information, production secrets, and complaints about Tesla's electric car features. The breach exposed the personal data of 75,000 people, potentially resulting in a$3.3 billion GDPR fine. Tesla filed lawsuits against the responsible ex-employees, but details on how they obtained access are not publicly available. The company likely failed to revoke access permissions upon termination. Conducting background checks during on-boarding could have helped detect malicious actions.[17]

SOME ETHICAL HACKING SUCCESS STORIES

The Mac software of Apple was exposed to a critical vulnerability, which Jonathan Leitschuh discovered on July 9th, 2019. Hackers were able to gain control of the front camera of a device through this vulnerability in the security framework. Consequently, many websites could force the user into a Zoom call without their knowledge. The invasion of privacy put millions of people at risk, including people who conduct meetings or use Zoom in general. A social media hack brought this to the attention of people, making it a particularly

[14] Mandavia, M. (2019, July 29). Data breach hits 120 million Reliance Jio subscribers in India. Bloomberg. https://www.bloomberg.com/news/articles/2019-07-29/data-breach-hits-120-million-reliance-jio-subscribers-in-india

[15] Mandavia, M. (2021, May 21). Air India data breach puts millions of customers at risk. Bloomberg. https://www.bloomberg.com/news/articles/2021-05-21/air-india-data-breach-puts-millions-of-customers-at-risk

[16] Safety Detectives Cybersecurity Team, Turkish Based Airline's Sensitive EFB Data Leaked. Available at https://www.safetydetectives.com/news/pegasus-leak-report/, last visited on 12.05.2024.

[17] Derek B. Johnson, Tesla says former employees leaked thousands of personal records to German news outlet, Available at https://www.scmagazine.com/news/tesla-says-former-employees-leaked- thousands-of-personal-records-to-german-news-outlet, last visited on 12.03.2024.

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important example of ethical hacking. Within a few hours, Apple released a simple patch to fix the problem, which users could download and install. A quick-fix patch was issued by Zoom too to fix the problem.[18]

Among the most famous ethical hacking cases published on the internet is the one involving the Visa card vulnerability that allowed bypassing payment limits. It happened on 29th July 2019. Two researchers from a company named Positive Technologies discovered an attack against Visa contactless cards. Due to this flaw in their security, the company will suffer a huge financial loss. The ethical hacking field gained popularity with this one case. It was discovered by Cyber Security Resilience Lead Leigh-Anne Galloway and Head of Banking Security Tim Yunusov. This information came out in public in response to five major UK banks being targeted.[19] This is a weakness that enables hackers to bypass the £30 limit put up by Visa on contactless verification, although it is actually £30 on Visa cards. Positive Technologies' Cyber Security Resilience Lead, Leigh-Anne Galloway, and Head of Banking Security, Tim Yunusov, were vital in discovering the attack on the Visa contactless cards. Their experience and dedication toward analyzing security vulnerabilities unearthed the flaw that made it possible for hackers to bypass the Visa £30 limit on contactless verification. Their discovery not only exposed the weaknesses in Visa's security measures but highlighted the importance of ethical hacking in unearthing and mitigating against potential cyber threats.

ETHICAL HACKING: AN APPROACH TO COMBAT CORPORATE DATA BREACHES

With the increasing use of the internet for banking, communication, shopping, and business, cyberspace has become an attractive platform for hackers. These hackers employ digital methods to breach computer systems, steal data, commit fraud, or disrupt systems by destroying files and documents. The convenience of Wi-Fi networks and social media accounts like Instagram and Facebook makes it easier for criminals to exploit users' personal information, such as images, videos, and passwords. The more a person uses the internet, the greater the risk they face from criminals and black hat hackers. However, ethical hacking offers a solution. Ethical hackers gain access to systems with permission to identify and address security vulnerabilities. The demand for certified ethical hackers and hacking courses has soared with the increasing number of online events worldwide. Furthermore, the COVID-19 pandemic has further accelerated the reliance on the online world for business, education, and human connectivity, leading to an exponential increase in the demand for cyber security experts. The promising future of ethical hacking is evident as it provides an effective defense against cyber threats. **I**n the current age of the internet, cyber criminals are constantly changing their tactics and using sophisticated methods to break into company systems and exploit their weaknesses. One of the threats that has emerged is micro laundering; here criminals use small electronic transactions conducted in thousands to launder large amounts of money making it hard to detect. To counter these malicious actors and secure corporate data, organizations must be proactive by nurturing a well-trained workforce capable of identifying and mitigating risks beforehand.[20] Teaching students ethical hacking pedagogy which involves training students on skills for ethical hacking has grown as an effective solution to this challenge. In this perspective, equipping learners with knowledge and competencies necessary to think like hackers will help in preparing them for any potential cyber security threat from attackers. By getting involved in hands-on exercises on penetration testing and vulnerability assessment, students can learn about criminal tools, techniques, and mindset used by hackers that will enable them develop strong defense strategies against such attacks. However, those supporting teaching ethical hacking methodology argue that it is the only way to create a competent cyber security workforce that can outsmart new hazards. Thus, forthcoming professionals would be able to determine and rectify vulnerabilities before they become the source of danger to the system. Moreover, the pedagogy of ethical hacking helps students understand legal and moral issues related to hacking while encouraging responsible behavior within cyber space. Essentially, this technique equips learners with both technical knowledge and strong moral values that enable

[18] Is zoom safe to use in 2024? (2024), retrieved from https://clearvpn.com/blog/zoom-security/#:~:text=In%20April%202021%2C%20cybersecurity%20researchers,end%20security%20features%20in%202020, last visited on 18.05.2024

[19] Christopher Boyd. (September 2019). International students in UK targeted by visa scammers. Malware Bytes Labs, available at https://www.malwarebytes.com/blog/news/2019/09/international-students-in-uk-targeted-by-visa-scammers, last visited on 18.05.2024

[20] Al-Tawil, T. N. (2023). Ethical implications for teaching students to hack to combat cybercrime and money laundering. Journal of Money Laundering Control, 2(1), 2-15. https://doi.org/10.1108/JMLC-08-2023-0001.

them to protect business information systems against any kind of intrusion Ethical hacking pedagogy is an ideal prospect towards grooming tomorrow's cybersecurity experts who should be ready for the emerging threats from malevolent hackers as well as cyber-criminals. In this regards, organizations are encouraged to embrace proactive measures such as training their employees on best practices in order to prevent data breaches among other forms of cyber-attacks which may compromise corporate information assets.

CONCLUSION

Ethical Hacking to be recognized as an independent act of security intelligence and given legislative backup, so that we can culminate the extra cost and time burden. Independent contracts which is now the recognized remedy will just bust a gut with average lump-sum expenses and waste of a corporate valued time, which in turn is a loss in time value of money.

In previous instances we have seen, the replacement of listing obligation with the LODR Regulation and similar accommodation of system to ease out on various compliances. The present study also seeks for a similar approach. We have travelled a lot towards enhancement of Corporate Governance. In addition to various Committees and Legal Compliance; now, it is the time, we need to concentrate highly on Data Security measures. Formation of a IT Cell in every company is the need of the hour.

And it continuation to this, the study here calls for an Ethical Hacking Regulation and Manual to track down this data security issues and give a one stop solution for corporate hacking. Through this study, we have analyzed that Hacking is a modernist approach of extortion and dacoity, which calls for modern system of combating principles. And this we propose to be the legalization of Ethical Hacking wherein, personal contractual obligations will solely be not the remedy to ethical hacking.

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REGULATING THE FREEDOM OF PRESS: INDIAN CONSTITUTIONAL PERSPECTIVES

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Abstract

Freedom of the press is a cornerstone of democracy, ensuring transparency, accountability, and the free exchange of ideas. In India, this freedom is derived from Article 19(1)(a) of the Constitution, which guarantees the right to freedom of speech and expression. However, this right is not absolute and is subject to reasonable restrictions under Article 19(2), which allows the state to regulate press freedom in the interest of sovereignty and integrity of India, national security, public order, decency, morality, and defamation. The Indian judiciary has played a crucial role in defining the contours of press freedom. Landmark cases such as Romesh Thapar v. State of Madras (1950), Bennett Coleman & Co. v. Union of India (1973), and Indian Express Newspapers v. Union of India (1985) have reinforced the principle that any restriction on press freedom must be justified under constitutional provisions. Despite constitutional safeguards, challenges persist, including censorship, sedition laws, defamation cases, and the misuse of regulatory mechanisms to curb dissent. With the rise of digital media, new concerns have emerged regarding fake news, media trials, and governmental control over online platforms. The Press Council of India, Information Technology Act, and other statutory frameworks attempt to balance freedom with responsibility. However, debates continue on the extent to which regulatory measures should be imposed without stifling journalistic independence. This paper examines the constitutional framework, judicial interpretations, and regulatory mechanisms governing press freedom in India. It also explores the challenges and future prospects of maintaining a balance between press autonomy and state control in a rapidly evolving media landscape.

Keywords**: **Freedom of Press, Press Regulation, Media Censorship, Digital Media, Freedom of Speech

INTRODUCTION

Free press is prerequisite for a democratic society. Present status of the press has been acquired after long struggle for its freedom. Several democratic movements contributed to make it free from governmental control. Free press is the most hard earned right was fought in the name of people. The concept of free press explained by Blackstone as:

"The liberty of press indeed is essential to the nature of Free State; … To subject the press to restrictive power of licensor is to subject all freedom of sentiments to the prejudice of one man can make him the arbitrary and infallible judge of all controverted points in learning, religion and government."[1]

A.V. Dicey also define freedom of the press on similar line of Blackstone and said: "*The freedom of press means the right of a person to publish what he pleases in the books or newspapers but law of England do not recognize any special privilege attached to the press."*[2]

First Press Commission of India attempted to define the concept of press freedom in the simplest sense as: "*Freedom to hold opinion, to receive and impart information through the printed words without any interference from public authority."*[3]

The judgment handed down by the Press Council India in *Varghese case* throws some light on the concept of freedom of the press as following:

"Freedom of press is commonly understood as the freedom of express, idea, viewsand information through

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[1] William Blackstone, "*Commentaries on Law of England"*, 152 (Volume IV,1765)
[2] A.V. Dicey, "*Introduction to the Study of Law and Constitution"* 239 (Oxford University Press ,8thed. 2010)
[3] The Report of First Press Commission 358(1954)

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the printed material and published for circulation; and free from interference, pressure, restraint or compulsions from whatever source; government or social."[4]

Importance of Free Press

The term "freedom" refers to the state of liberty, or right and privilege to express and act according one's own free choice or will. Press being the strongest medium of communication becomes significant to disseminate information to the society. It is the most important and vital medium to express one's opinion, views, and philosophy. Free press plays vital role in a democratic society as it provides a larger platform to share any expression to largest number of people.

A free press plays vital and significant role in political, economic, social and cultural spheres of life of a nation. A free press committed to public service has immeasurable potential for public good. It can enlighten public opinion and help promote social cohesion, moral regeneration, national integration, international understanding, cooperation, amity and peace. By the power and influence of it pen, it can facilitate the evolution of egalitarian society, in which economic disparities, unequal opportunities and social inequalities are reduced to the minimum. It is now self-evident that freedom of the press is essential for smooth functioning of a democratic system of the government.

CONSTITUTIONAL GUARANTEE

The Preamble of the Indian Constitution guarantees the Indian citizens "liberty of thought, expression, belief, faith and worship". The importance of "freedom of speech and expression" is described in the Preamble of the Indian Constitution and is secured as one of the fundamental rights under Article 19 (1) in sub clause (a) as "*right to freedom of speech and expression". It is to "express one's convictions and opinions or ideas freely, through any communicable medium or visible representation such as gesture, sings and the like. It means to lays whatsentiments; a free citizen pleases before the public".*[5]

Although not explicitly mentioned, "Freedom of speech and expression" includes "freedom of press" within it ambit that has been held in several judgments of the honorable Supreme Court.[6] Article19 (1) (a)[7] of the Indian Constitution guarantees to the citizens, the right to "freedom of speech and expression." The ambit of this freedom is not confined to mere oral utterances. It also includes freedom to communicate or circulate information and views by written words or through printed material. It is thus obvious that the freedom of the press is an integral part of „freedom of expression" and Article 19(1) (a).

Freedom of the press is encompasses more than a neutral medium of communication between people and their elected leaders. In India prior to the independence there was not constitutional or legal guarantee of liberty of an individual and as well as of the press. At the maximum some common law freedoms were provided to the press as the Privy Council observed that:

"The freedom of the journalist is an ordinary part of the freedom of the subject and to whatever length, the subject in general may go, so also may the journalist, but apart from statute law his privilege is no other and no higher. The range of his assertions, his criticisms or his comments is as wide as, and no wider than that of any other subject."[8]

The purpose of the press is to advance the public interest by publishing facts and opinions without which democratic electorate cannot make responsible judgment. Newspapers being purveyors of news and views having g bearing on public administration very often carry material which would not be palatable to government and other authorities.[9]

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[4] *K.K.Birla* v. *Press Council of India & Ors*, ILR 1976 Delhi
[5] *Lovell* v. *City of Griffin*, (1937) 303 US 444
[6] *Sakal Papers (P) Ltd.* v. *Union of India*, AIR 1962, SC 305; *Bennett Coleman & Co. & Ors* v. *Union of India* AIR 1973, SCR (2) 757; *Printers (Mysore) Ltd.* v. *Assistant Commercial Tax Officer*, AIR 1994, 2 SCC 434; *Indian Express Newspapers (Bombay) Private Ltd.* v. *Union of India & Ors.* 1985 (2) SCR 287
[7] The Constitution of India, Article 19 (1) (a) reads: "*All citizens shall have the right to 'freedom of speech andexpression".*
[8] *Channing Arnold v. King Emperor* AIR 1914 PC 116.
[9] H. K. Saharay, *The Constitution of India* 264 (2012)

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Unlike the American Constitution, Article 19 (1) does not specifically or separately provide the liberty of the press. The omission was explained by Dr. B. R. Ambedkar as he observed that the rights of the press are the same as the rights which are exercised by the citizens in individual capacity and no special rights are available to the press including the editor or the manager. There is no doubt that the right to freedom of speech and expression as given in Article 19 (1) (a) of Indian constitution is inclusive of the liberty of the press.

Freedom of the press is not expressly provided in Indian Constitution or in any otherlegal instrument but it is implicit or implied in the freedom of speech and expression guaranteed under Article 19(1)(a) of the Constitution of India. Article 19(1)(a) says that all citizens shall have the right to freedom of speech and expression. But this right is subjectto reasonable restrictions imposed on the expression of this right for certain purposes under Article 19(2). Article 19(1)(a) corresponds to the First Amendment of the United States Constitution which prohibits the Congress from making any law breaching the freedom of speech or expression of the press.[10]

REASONABLE RESTRICTIONS

All rights and freedoms are born in a society. It is society wherein the rights and freedomsare to be exercised and it is the society which protects them, the orderly survival and safety ofthe society are prerequisite for their exercise. The interests of the society are therefore paramount and precedence over the rights and freedoms of individuals. This is also true to the right of "freedom of speech and expression" and of the progeny the "freedom of the press" Neither the right of free speech and expression nor the right to the press freedom has precedence over the other human rights nor does it have preferential position over them.

All societies have found it necessary to curb free speech and expression of the individuals and freedom of the press to prevent the freedom from degenerating into a license, to prevent its encroachment on the right of others and to safeguard the interest of the society as a whole. The constitutions of some countries enumerate these grounds specifically, and where the written constitution is supreme as in India, they are exhaustive of the grounds on which the restrictions can be placed on the freedom of the press. No more may be added, to them exceptby a constitutional amendment.

The restrictions on the freedom of the press imposed on the grounds enumerated above must however have a direct and a rational or proximate and not indirect and remote connection with the concerned ground. The restrictions must also be reasonable. They should regulate and not completely control or prohibit the press freedom. The restrictions which can be imposed on the fundamental rights contained in Article 19(1) and as per clause (2) of Article 19 specifies the purposes or grounds in the interest of which or in relation to which reasonable restrictions can be imposed on the freedom of speech and expression which include, among others, restrictions in the interest of (i) the sovereigntyand integrity of India; (ii) public order; (iii) morality; etc.[11]Supreme Court noticed that reasonable restrictions can be imposed under Clause Article 19 clause 2 only by a duly enacted law. Such restrictions cannot be imposed by any executive action alone.[12] The reasonableness of a restriction has to be determined in an objective manner and from the standpoint of the interests of general public and not from the point of view of the persons upon whom restrictions are imposed or upon abstract consideration.[13]The restrictions on the freedom of press in detail are as follow-

a. National Interest and Press Freedom

The press may deal with, criticize or comment upon the affairs of the civil as well as the political society, of the nation. In the process, it may promote or imperil the interests of either. The matters pertaining to language, culture, religion, customs and traditions are as much sensitive as are those relating to internal and external security, unity and integrity, and public order. In the exercise of its freedom, the press may inflame passions, ferment conflicts and create law and order problems internally as it may create tensions and misunderstandings between nations, or trigger wars and hostiles between them. The term national interest is wide enough to cover a variety of subjects ranging from the unity, sovereignty and security of the state to morality, economic stability

[10] M.P. Jain, *Indian Constitutional Law* 986 (2008).
[11] H. M. Seervai, *Constitutional Law of India* 703 (2007).
[12] *Krishnan Kakkanth* v. *State of Kerala*, AIR 1997 SC 128.
[13] R. C. Agarwal, *Constitutional Development and National Movement of India* 423 (2009).

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and communal harmony. No state can permit the use of press for propagating secession, sedition or disorder, or to oppose war efforts, to demoralize its defense forces or to create disaffection amongst them. Therefore in almost all democracies freedom of the press is not absolute.

b. Security of State

The expression "security of the State" refers to serious and aggravated forms of public disorder such as insurrection, rebellion or waging war against the State. We may thus infer that violence committed with the intention of overthrowing a government, waging of war and rebellion against the Government, external aggression or war etc may threaten the security of the State.

A Speech advocating a change in the system of government cannot be said to involve a threat to the security of the State so long as the change advocated is not unconstitutional.[14]However the speeches or expressions on the part of the individual, which may motivate violent crimes, like taking life of somebody would pose a threat to the security of the State.[15]

The expression "security of the State" in Article 19(2) does not merely mean as dangerto the security of the entire country. Endangering the security of a part of the State would involve a threat to the security of the State.

c. Friendly Relations with Foreign States

The first amendment to the Constitution in 1951 added this ground to Article 19(2) . The object behind this provision is to prohibit any unrestrained malicious propaganda against a foreign State so that the friendly relations between India and that country are maintained. The Foreign Relations Act, 1932, makes provision for punishing any libel by citizen of India against foreign dignitaries. Such like laws fall within this expression and are saved by Article 19(2) discussed inthe case of *Jagan Nath* v. *Union of India.*[16]

d. Public Order

This ground was added by the Constitution (First Amendment) Act, 1951, as a consequence of the decision given by the Apex Court of India in *Romesh Thaper* v. *State of Madras*[17],wherein the Supreme Court rejected the argument that public order falls within the ambit of the expression "Security of State". The Court held that the concept of "public order" was wider than "Security of the State". "Public order" was an expression of wide connotation and signified "that state of tranquility which prevails among the members of political society as a result of internal regulations enforced by the Government which they have established".

In the case of *Babulal Parate*[18] the court held that as per Section 144 of the Codeof Criminal Procedure, 1973 empowers Magistrate if according to the Magistrate there exists sufficient ground for immediate prevention by a written order to direct a person or persons to abstain from certain acts, if he considers that such direction is likely to prevent or tends to preventa disturbance of public tranquility or a riot or an affray was upheld and court ruled that anticipatory action to prevent disorder was within the ambit of Article 19 (2).

Similarly, in the case of *Kedar Nath* v. *State of Bihar*[19] the court held that Sections 124-A and 505 of the Indian Penal Code, 1860 were upheld as imposing reasonable restrictions in the interest of Public order in any statement publish in newspaper by press or otherwise.

e. Decency or Morality

Restrains on the freedom of press can also be imposed in the interests of decency or morality. The purpose is to restricting speeches and publications which tend to underminepublic morals. The word "decency" connotes the same as lack of obscenity and the word "obscenity" is identical with the word indecency.

The Indian Penal Code, 1860 prohibit the sale or distribution or exhibition of obscene matter or the doing of obscene acts or singing of obscene songs or uttering of obscene words, etc., in public places when the tendency

[14] *Ram Nandan* v. *State*, AIR 1959 All 101.
[15] *State of Bihar v. Shailabala Devi*, AIR 1952 SC 329
[16] AIR 1960 SC 675
[17] Supdt.Central Prison v. Ram Manohar Lohia, AIR 1960 SC 633.
[18] *Babulal Parate* v. *State of Maharashtra*, AIR 1961 SC 884.
[19] AIR 1962 SC 955.

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of the matter which is charged as obscene is to corrupt those minds which are open to immoral influences and into whose hands such a publication may fall. Thus, a matter would be termed as obscene if it tends to produce lascivious thoughts and arouse lustful desire in the minds of substantial numbers of that public into whom hands the matter is likely to fall. It may be noted that no fixed standard can be laid down as to what is moral or indecent. The concept of morality differs from place to place and from time to time.[20]

In the case of *R.Y. Prabhoo* v. *P. K. Kunte*,[21] the Supreme Court has ruled that the words "decency and morality "in Article 19 (2) could not be restricted to sexual morality alone and the ordinary dictionary meaning of "decency" indicated that the action must be in conformity with the current standards of behavior or propriety, etc. Similarly, in the case of *Knuller (Publishing, Printing and Promotion) Ltd.* v. *Director of Public Prosecutions*,[22] the court said that indecency is not confined to sexual indecency but indeed it is difficult to find any limit short of saying that it includes anything which an ordinary descent manor woman would find to be shocking, disgusting or revolting.

f. Contempt of Court

The right to freedom of speech and expression does not authorise a person to commit contempt of court. None can be allowed to proceed with the contempt of court with the intention of scandalizing the authority of any court as was held in the case of *Radha Mohan Lal* v. *Rajasthan High Court.*[23] The freedom cannot be equated or confused with a licence to make unfounded and irresponsible allegations against the judiciary. The law relating to the contempt of court thus imposes reasonable restrictions on the freedom and is within the ambit of Article 19 (2).

The expression "contempt of court" is defined in the Contempt of Courts Act, 1971 means may be civil or criminal contempt.[24] In the case of *D.C. Saxena case*[25] the Supreme Court explained the freedom of press would be subjected to Articles 19 (2), 129 and 215. It would not be confounded or confused with licence to make unfounded allegations against any institution much less the judiciary.

Making scurrilous and scandalizing allegations against the Judge or the Court willfully and advertently, neglected to perform constitutional duty which he holds scared which is a wrong-doing. It is necessary to make it clear that liberty of free expression of the judiciary isnot to be confounded with a licence to make unfounded and irresponsible allegations of corruption against the judiciary. The effect of such imputation is lowering of the dignity and authority of the court and an affront to the majesty of justice.

g. Defamation

Since the dawn of civilization the reputation of a person, the esteem in which he is held in the society, the credit reposed in his intellectual capacity and moral integrity by others is considered one of the most valuable assets. Love for one's own fame and reputation is, to an individual, oxygen of dignified self-subsistence, and the main spring of the action. For maintaining the dignity of an individual, promoting his happiness and preserving his capacity for public good, it is necessary to protect and encourage these human values which are basic postulate of law of defamation and norms of journalistic ethic relating to that subject.

In India defamation is both civil wrong or tort and criminal offence. The law of defamation as civil wrong consist a bunch of principles borrowed mostly form common law of England.

The freedom of the press cannot be used to transgress the law relating to defamation. The word "defamation" covers both the crime and the tort under Article 19 (2) where it means the entire law of defamation, civil and criminal. Every person possessed a right to his reputation and therefore nobody can so use his freedom of press as well as freedom of speech and expression through media as to injure another" reputation.

[20] Narendra Kumar, *Constitutional Law of India* 208 (2004).
[21] AIR 1996 SC 1113.
[22] (1972) 2 All E.R. 898.
[23] AIR 2003 SC 1467
[24] Section 2 (a) of the Contempt of Courts Act, 1971
[25] AIR 1971 SC 1132

Section 499[26] of Indian Penal Code defines criminal defamation, and it recognizes that there is no distinction between defamatory statement address to the ear or eyes and thus includes both slander and libel. The Calcutta High Court in the point out that defamatory matter put in writing is a libel while in spoken words or gesture, it amounts to slander. In view of the express saving in Article 19 (2), Section 499 of the Indian Penal Code, 1860 has been held to be not violative of Article 19 (1) (a).[27]

The Apex Court observed in the case of *M. H. Devendrappa* v. *Karnataka State Small Industries Development Corporation,*[28]and upheld the dismissal from service of an employee on the ground of making allegations about mismanagement against the head of his organization and issuing press statements of political nature. His conduct was held to be detrimental to interests and prestige of the organization.

h. Incitement to an Offence

This ground was added to Article 19 (2) by the Constitution (First Amendment) Act, 1951. The Allahabad High Court in the case of *Dr. Ram Manohar Lohia* v. *Supdt. Central Prison, Fatehgarh*[29] held that "incitement to an offence" did not mean an incitement to break a law . An incitement to a breach of every civil law is not necessarily contemplated by Article 19 (2).

i. Sovereignty and Integrity of India

In 1963 "Sovereignty and Integrity of India" was added as a ground to impose reasonable restrictions to freedom of speech and expression[30] with the purpose to protect the freedom of speech and expression and liberty of press from being used to challenge the sovereignty and territorial integrity of the country.

j. Sedition

The word "Sedition" is not mentioned in clause (2) of the Article 19 but as per Indian Penal Code, 1860 which defines the offence of sedition and it means whoever by words either spoken or written, or by signs or by visible representation or otherwise, brings or attempts to bring into hatred or contempt or excites or attempts to excite disaffection towards the government established by law in India shall be considered to be the offence of sedition.[31]

k. Restriction on the Press as a Business

The press today is also run as a business, and as a business it can be subjected to legal restrictions as any other business. These restrictions however have to be general in nature that is, applicable to all businesses and not aimed directly or indirectly, exclusively at the press. The restrictions should also not directly impede the freedom of the press.

The business of the press however cannot claim exemption or special concession from the general civil and criminal law, labour legislation, taxation, import and export restrictions, restrictions on monopolies and trade practices, municipal laws relating to buildings and licenses, factory legislation etc. the constitutions of the countries like countries India enable the state to place restrictions, on specified grounds, on carrying on any trade, business, avocation or profession, and the restrictions so imposed generally on all avocations and businesses apply equally to the media business. The constitutions like those of the U.S.A. do not enumerate

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[26] The Indian Penal Code, 1860. Section 499 reads: Defamation. — *"Whoever, by words either spoken or intended to be read, or by signs or by visible representations, makes or publishes any imputation concerning any person intending to harm, or knowing or having reason to believe that such imputation will harm, the reputation of such person, is said, except in the cases hereinafter expected, to defame that person"*
Explanation 1.—"*It may amount to defamation to impute anything to a deceased person, if the imputation would harm the reputation of that person if living, and is intended to be hurtful to the feelings of his family or other near relatives."*
Explanation 2.—"*It may amount to defamation to make an imputation concerning a company or an association or collection of persons as such.*
Explanation 3.—"*An imputation in the form of an alternative or expressed ironically, may amount to defamation*.

[27] *Suresh Chandra* v. *Panbit Goala* AIR 1958 Cal 176

[28] AIR 1998 SC 1064

[29] AIR 1955 All 377.

[30] By the Constitution (Sixteenth Amendment) Act, 1963.

[31] The Indian Penal Code, 1860, section 124-A reads: .*—"Whoever, by words, either spoken or written, or by signs, or by visible representation, or otherwise, brings or attempts to bring into hatred or contempt, or excites or attempts to excite disaffection towards, the Government established by law in India], shall be punished with imprisonment for life to which fine may be added, or with imprisonment which may extend to three years, to which fine may be added, or with fine".*

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the grounds on which the restrictions may be placed on carrying n the business. The judiciary there was however evolved restrictions on the business under the doctrines of the" police" and "commerce" powers and they apply equally to the business in media. As stated earlier the rationality and the reasonableness of the restrictions have however have to be examined by the courts in both the systems in the light of their direct impact on the freedom of the media.

CONCLUSION

Freedom of press laid at the foundation of all democratic organisations, for without free political discussion no public education, so essential for the process of proper government is possible. A freedom of such amplitude might involve risks of abuse. But the framers of the Constitution may well have reflected with Madison, who was the leading spirit in the preparation of the first amendment of the Federal Constitution that it is better to leave a few of its noxious the vigour of those yielding the proper fruits.[32]

Each one of the fundamental freedoms guaranteed by the constitution of India is hedged by many restrictions. They are not absolute. This led to the criticism that Indian freedom is a myth and not reality for what has been given with one hand has been taken away with the other.

This criticism is unfair and for fundamental rights can nowhere be absolute. For logically, one can be absolutely free only when all others are absolute, slaves Individual freedom to be real must be social and hence must be limited. There is a difference in the scheme of limitations on fundamental rights in the U.S. constitution and in the constitution of India. In the U.S.A. the restrictions are not mentioned in the constitution itself. This is left to judicial interpretations. In India on the other hand, the restrictions are mentioned in the constitution itself. It is not left to the vagaries of judicial interpretation. Freedom refers to the state of liberty, or right and privileged to speak and act accordingto one's own will. Press and media includes print, electronic and online are the most important medium of expressing opinion of the people in a democratic country that justifies one's individual right to speech and expression, a coveted right enshrined in the Indian Constitution and in the Constitution of other countries on the globe.

In a democracy, freedom of speech and expression opens up channels of free discussion of issues. Freedom of press plays a crucial role in the formation of public opinion on social, political and economic matters. Freedom of speech and expression is a natural right which a human being acquires on birth and freedom of press is a part and parcel of this right. The words "freedom of speech and expression" have to be broadly construed to include the freedom to circulate one's views by words of mouth or in writing or through press. Once it is conceded and it cannot indeed be disputed that freedom of press includes freedom of circulation of ideas, there can be no doubt that the right extends to the citizen being permitted to use the media to answer the criticism levelled against the views propagated by him.

[32] Mahendra P. Singh, *Constitution of India* 106 (2007)

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