LEGAL CHALLENGES IN COMBATING CYBER CRIMES: A CRITICAL ANALYSIS

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ABSTRACT

The digital revolution stimulated by the initiation of internet connectivity in India has much larger levels, now becoming the third largest digital economy in the world. Along with such applications, there is an equivalent high propensity for cybercrimes which is a serious challenge to rights, national security, and economic stability. The paper is thus a critical analysis of legal and institutional responses to cyber crime in India, covering important laws like the Information Technology Act, 2000, the Indian Penal Code, and the forthcoming Digital Personal Data Protection Act, 2023. Its focus will be on the various aspects of cyber threats-from hacking, identity theft, cyber terrorism, and deepfake frauds. The paper will also address systemic deficiencies such as ambiguity over jurisdiction, inadequate definitions-law definitions, evidence challenges and poor international cooperation. It compares-defines India's legal framework with the cybercrime enforcement models in the United States, European Union, and Singapore to identify best practices and legislative gaps. It finally proposes policy recommendations that strengthen the Indian cyber law ecosystem by legal reforms, institutional modernization, capacity building, and cross-border collaboration. Overall, it can be said that this research also emphasizes the urgent necessity for harmonized, technologically adaptive, rights-based legal frameworks to combat the evolving landscape of cyber crimes in a digitally-dependent India.

INTRODUCTION

It's changing humans' lives, behaviour, or trade activities in the digital age. The invention of the internet, mobile, and complex computing technologies greatly propelled societies into the worldwide connectivity and global digitization. Recently, this digital revolution is going faster in India, where government initiatives like Digital India work to convert the country into a digitally empowered society and knowledge economy. However, this has laid benefits and efficiencies in its way of life and exposed individuals, corporations, and governments to unprecedented vulnerabilities.[1] Cyber-crimes refer to conditions or events in which computers and networks become a source or target for committing crimes or unlawful activity activities. Thus, cyber-crimes are the key legal and security issues today. The possible forms of cybercrimes are data breaches, financial fraud, cyber bullying, and ransom ware; the scope keeps growing. Cyber-crime is beyond the borders for geo selling its detection, investigation, and prosecution. Despite legislative efforts to catch up, the legal system of India is not catching up with the rapidly changing faces of cyber threats but instead leaving a large enforcement gap. Unique nature of cyber-crime in exploiting anonymity and borderless cyberspaces has now rendered the crime as one where the offenders are located in different jurisdictions from their victims, making assignment of responsibility and legal accountability difficult. The increasingly sophisticated and resourceful nature of cyber criminals using encryption, VPNs, dark web technologies, etc., also makes effective enforcement of laws more complicated. As digital systems increasingly provide basic services like banking, healthcare, education, and governance, the impact of cyber-attacks is profound on individual rights, national security, and economic stability.[2]

Growth of Digital Age

There was digital transformation in diverse spheres of human life at the dawn of the twenty-first century, where internet usage was now becoming ubiquitous. India, with its vast populous middle class, is among the largest countries using digital technologies.[3] As of 2024, more than 850 million Indians are online and getting digital services available in remote and rural areas.

[1] Susan W Brenner, *Cybercrime and the Law: Challenges, Issues, and Outcomes* (Routledge 2012)
[2] Ishan Atrey, 'Cybercrime and its Legal Implications: Analysing the Challenges and Legal Frameworks Surrounding Cybercrime, Including Issues Related to Jurisdiction, Privacy, and Digital Evidence' (2023) 10 *Journal* 183
[3] IALM, 'Cybercrime in India: Legal Hurdles and Challenges' (IALM Academy, 22 July 2021) https://ialm.academy/blog/cybercrime-in-india-legal-hurdles-and-challenges accessed 14 April 2025.

Although these services democratized access to information and services, they nevertheless made the populace more vulnerable to cyber threats. There is a positive relationship between the increase of cyberspace and the increase in cyber-crime in India. Cyber-crimes in India have advanced tremendously in the past decade as per the reports of NCRB records. The most prevalent among such crimes were financial fraud, identity thefts, and cyberstalking. It also accelerated the online platforms for work, education, and commerce, which also set off a tide of cyber-attacks upon unguarded users and organizations. During the crisis, cyber criminals launched phishing scams, ransomware attacks on hospitals, and impersonation frauds, exposing gaps in digital security and law enforcement preparedness. Change is constant in cyber-crime; it is evolving all the time. New forms of crimes, traditional crimes are now becoming digitalized. Incidents of defamation, extortion, and harassment, in addition, will now take place as follows: on social media platforms, on messaging applications, on private emails. New types of crime have emerged, such as crypto-jacking, deepfake frauds, reporting the evolving nature of crime in cyber space. Rapid technical understanding and response from the legal system are often required to capture the real-time nature of these new threats, which the existing legal frameworks, meant essentially for an analogy age, are ill-equipped to provide.

Increasing Dependency on Technology and Vulnerability to Cyber Threats[4]

Modern society's increasing dependence on technology has largely conversely, impugned itself in the light of increased threats present in cyberspace. The digitization of any kind of transaction-whether it be for financial gain, government services, or private communications-means that a small lapse in security can lead to monumental data leaks and financial losses with the resultant erosion in public confidence. With examples, the proliferation of the Unified Payments Interface (UPI), mobile wallets, and online banking in India has made financial systems an ever-lucrative target for hackers. The other end of the spectrum is presented by the Aadhaar-linked schemes that keep a huge repository of personal information about individuals on the basis of which digital IDs get issued. A successful cyber breach pose serious threats to these platforms with respect to privacy. There is no end to protect institutions. Critical infrastructure, like power grids, transportation networks, and healthcare systems, are ever so increasingly connected to the internet and thus exposed to cyber espionage and sabotage. Ransomware attacks on hospitals and universities occurring in India have put forth serious

[4] Sumit Ghosh and Elliot Turrini, *Cybercrimes: A Multidisciplinary Analysis* (Springer 2014)

concerns over preparedness and the pressing need for a comprehensive framework for cybersecurity. The presence of IoT and AI in itself increases the difficulty for any kind of legislation because whatever laws have been framed may not strictly account for such systems' autonomous and interconnected behaviour. More importantly, being vulnerable to cyber-crimes is much more than just a technological concern-it is a very legal and regulatory one. In addressing this matter, the legal mechanism must be such as to tether down cyber criminals, placate victims, regulate digital platforms, and further the interests of digital rights. In any case, cyber law in India, which is predominantly motivated by the Information Technology Act, 2000, is considered outdated, loaded with vague definitions, and devoid of procedural clarity. Enforcement agencies, as a matter of fact, find themselves under-trained and ill-equipped to tackle the highly sophisticated threats, and a significant gap continues to persist between the pace of advancement of technology and the adaptability of the law.[5]

The menace of cyber-crime needs a proliferation of approaches, firmly rooted in multi-disciplinarity, involving legal reform, institutional capacity building, technological adjustability, and international cooperation. The legal system must evolve to address not only the criminalization of new forms of digital misbehaviour but also to ensure procedural justice, data protection, and rights-based governance in cyberspace. This research paper aims to look into these legal challenges in depth, critically assesses the ability or otherwise of the existing laws, speaks to institutional impediments, and proffers policy recommendations so that India's response to cyber-crime may be capitalized upon.[6]

INDIAN LEGAL FRAMEWORK

In the contemporary time, cyber-crime has turned out to be one of the crucial parts really demanding research or work on effective detection and differentiation from other crimes, as it covers almost all aspects of unlawful activity associated with the medium of computers, computer networks, and digital devices.[7] While most crimes would usually occur in a specific geographic location, a cyber-crime can be committed all over the world, often without physical evidence. The evolution of cyber-crime has come along with technological advancements and now includes crimes where the computer serves as a central focus or where it is only a tool.

[5] Ajoy PB, 'Effectiveness of Criminal Law in Tackling Cybercrime: A Critical Analysis' (2022) 5(2) *Scholars International Journal of Law, Crime and Justice* 74
[6] Anita Singh, Pradeep Kulshrestha and Ritu Gautam, *Cyber Crime, Regulations and Security - Contemporary Issues and Challenges* (2022) ISBN 978-81-956533-0-0
[7] Suresh T Viswanathan, *Bharat's The Indian Cyber Laws with Cyber Glossary* (Bharat Law House 2001)

Cyber-crime has a broad definition in the Information Technology Act, 2000 and covers offences involving misuse of computers, computer systems, or electronic devices. Data theft, cyber terrorism,[8] online defamation, and accessing unauthorized computer networks are some typical illegal categories under this act.

Hacking among others has drawn more people's attention, as it constitutes the most popular type of cybercrime. It's an unauthorized access to a computer system with the aim of stealing, manipulating, or destroying the data, and it leads to the most serious repercussions- data breaches and monetary loss. Phishing tricks are attempts used to acquire sensitive information about passwords, credit card numbers, or other identification by masking as a trustworthy source in electronic communications. Identity theft usually means acting or impersonating someone else using their information without consent for conducting fraud or taking other illegal benefits. Cyber stalking has also become another crime that has quickly flown among the many electronic forms of threats harassing or intimidating someone using electronic communications generally, with women[9] and minors being highly targeted. Came comprised sending threatening messages, tracking digital footprints, or disseminating information online concerning content to which the victim did not consent. The highest form of cyber-crime is cyber terrorism since it intends damage, panic, or disruption into national security through computer networks or systems that are assailed. The offenses of cyber terrorism can include the assaulting or crippling of critical infrastructures such as transportation systems, defence networks, or financial markets, proving this to be of utmost concern for law enforcement and policy makers.

Indian Law has therefore evolved a whole range of legal enactments to deal with the multifaceted offences of information processes at the Information Technology, 2000 (IT Act) level, the primary legislation dealing with cyber-crime. It serves as the basis for providing meaningful legal sanctity to electronic commerce and digital signatures and outlines various offences along with their penal sanctions. The amendments regarding the inclusion of a number of offences concerning cyber terrorism (Section 66F), identity theft (Section 66C), and violation of privacy (Section 66E)-and the publication or transmission of sexually explicit content (Section 67A and 67B)-into the Act have significantly enlarged the scope of the IT Act.

[8] Babak Akhgar, Andrew Staniforth and Francesca Bosco, *Cyber Crime and Cyber Terrorism Investigator's Handbook* (Syngress 2014)
[9] Debarati Halder and K Jaishankar, *Cyber Crimes Against Women in India* (SAGE Publications India 2017)

The Act also provides for intermediary liability under Section 79, which was central to legal debates relating to accountability of platforms. However, while the IT Act provides some foundational elements for cyber law in India, it is yet not procedural in clarity nor sufficiently responsive to the changing faces of technology in crimes.

The Indian Penal Code (IPC), often described as heavy artillery in the works with cybercrimes that bear the characteristics of the traditional criminality, complements the IT Act. Within the IPC, there are constant references to Sections such as Section 419 (cheating and impersonation); Section 463 (forgery); Section 499 (defamation); and Section 506 (criminal intimidation). These often find application in cyber-crime cases, particularly for online fraud, cyberbullying, and cyber defamation cases. Therefore, the IPC acts in aid where cybercrimes intersect with conventional crimes. The IPC works in an imaginative way or creatively, drawing a pattern of actual interpretation or application that leads to awkwardness in cybercrime. Whatever the 'letter of law' works, it adds a little to the obvious will and intent in any law.[10]

In the year 2023, India enacted the DPDP Act, a significant milestone toward data privacy and regulation of digital data usage.[11] It is true that the Act's primary target is data protection, but its implications for the law on cyber-crime cannot be ignored, particularly in matters relating to unauthorized access to personal data, data breaches, and duties for data fiduciaries. It empowers the Data Protection Board to hear complaints and impose penalties for non-compliance. This Act recognizes the rights of individuals to seek redress for infringements of privacy. Nevertheless, critics argue that the DPDP Act lacks an apparent mechanism to enforce criminal offences. It poorly regulates state surveillance and simultaneously overlooks the intersection of a data breach with respect to cyber-crime prosecution. Further legal harmonization between DPDP and the IT Act is required.

The law enforcement of cybercrimes in India is therefore delinked between various authorities. Cyber Crime Cells forming a backbone for policing in states and union territories investigate cyber offences. Their work widely varies from state to state, based on each state's infrastructure, training, and coordination with their counterparts. CERT-In, housed under the

[10] Abraham D Sofaer and Seymour E Goodman (eds), *The Transnational Dimension of Cyber Crime and Terrorism* (Hoover Institution Press 2001)

[11] Abhishek Kumar, Prabhat Deep, Shivam Raghuvanshi and Vivek Kumar, 'India's New Data Frontier: A Critical Legal Insight of the Personal Data Protection Act, 2023' (2024) 44 *Library Progress International* 11776

Ministry of Electronics and Information Technology, is one of the foremost agencies to coordinate cybersecurity events, issuing advisories, and coordinating response efforts to large-scale attacks. CERT-In has wide-ranging powers, including requesting the disclosure of data and other information from service providers and ensuring compliance for preventive action, especially under Section 70B of the IT Act. However, the lack of cohesion between CERT-In, the local police, and the judiciary tends to create bottlenecks to carry out a thorough investigation and prosecution. Offences are often found to have jurisdictional issues, as the parties involved reside in different states or countries. The absence of a clear delineation of procedural norms regarding cross-border cooperation and the gathering of evidence makes prosecution exceedingly difficult.

How far better the substantial judicial pronouncements have sketched their boundaries around the jurisprudence of cyber-crime in India! In *Shreya Singhal v. Union of India (2015)*[12], the Supreme Court upheld the judgment regarding the invalidation of Section 66A from the IT Act, under which a person was punished for sending any offensive messages through a communication service. The Court observed that the provision is vague and of a prohibitive nature to the right of freedom of speech under Article 19(1)(a) of the Constitution. The judgment is a victory for digital rights while vacuuming in issues such as the regulation of online hate speech and threats, which are again under consideration. Next, in importance is the judgment in *State of Tamil Nadu v. Suhas Katti (2004),*[13] one of the earliest convictions employing the IT Act. The conviction was for a man who posted obscene messages in a Yahoo message group. The man was convicted under Sections 67 of the IT Act and Section 509 of the IPC, where the case of Suhas Katti became a landmark towards recognition of cyber harassment against women. Other important judgments in the above regard are *K.S. Puttaswamy v. Union of India (2017)*[14], where the Supreme Court accepted the right to privacy[15] as a fundamental right under Article 21. While not strictly a cybercrime case, the verdict impacts digital surveillance and data breaches much deeper, as it strengthens the foundation of the constitution for privacy-related cyber-crime litigation. A similar kind of case was *Manik Taneja v. State of Karnataka (2015)*[16], where the court shielded people's expression

[12] Shreya Singhal v Union of India (2015) 5 SCC 1
[13] State of Tamil Nadu v Suhas Katti (2004) 3 Mad LJ 1.
[14] K.S. Puttaswamy v Union of India (2017) 10 SCC 1.
[15] Samuel D Warren and Louis D Brandeis, 'The Right to Privacy' (1890) 4 Harvard Law Review 193
[16] Manik Taneja & Anr v State of Karnataka & Anr (2015) 7 SCC 423

of grievances through social media and put more emphasis on ensuring a balance between sentencing for cyber-crime and civil liberties.

LEGAL CHALLENGES AND COMPARATIVE ANALYSIS

The Indian legal system presently faces many hurdles concerning the enforcement of cyber laws through a well-defined legal framework as enshrined in the Information Technology Act, 2000 and the allied laws. Cyber criminality is affected by jurisdictional ambiguity, technical shortcomings, evidentiary limitations, or weak global cooperation. These impediments affect the working of the cybercrime enforcement machinery and raise questions regarding the preparedness of the Indian legal system to deal with technology-enabled and transnational crimes.

The conflict of laws occasioned by jurisdiction in cross-border cyber-crime is one of the most disturbing facets of the problem. Cyber-crimes usually arise from one country and adversely affect victims in another, posing differing laws of the land and investigative authorities. Police jurisdictions in India are in a vast majority of the cases territorial by Code of Criminal Procedure, 1973, which makes the prosecution of crimes committed from foreign turf difficult. The procedure of acquiring evidence or cooperation from foreign jurisdictions is unbearably slow and unreliable, especially in the absence of mutual legal assistance treaties (MLATs) or bilateral agreements of sound strength. If the hacker based in Eastern Europe hacked into the Indian banking server, Indian law enforcement would not be having any other straight route of law for investigation without getting entangled in a maze of diplomatic channels. Furthermore, many global technology firms store user data in servers situated outside India, compounding the accessibility of relevant evidence. This results in jurisdictional delays but also, with procedural bottlenecks, causes victims to be denied justice.

Additional hindrance to this is the lack of technical knowledge and investigative capability in law enforcement for implementing cyber laws in India. While some of the metropolitan cities have cyber-crime units, the extent of these units is very unevenly distributed across the country. Other cities may have limited staffing or poorly trained officers in cyber forensics, encryption technologies, blockchain analysis, or deep web tracking. This frequently results in problems like mishandling of digital evidence, delayed responses to cyber incidents, or simply hinder effective tracing of the offender. Even this new area of the Indian judiciary appears to be straining to catch up with technological issues. The problem for the justice system significantly

grows due to the growing use of anonymization techniques and algorithms exploited by cyber criminals. The absence of coordination between CERT-IN, local cyber cells, and other law enforcement agencies further depletes national cyber defence capabilities.

Another big hindrance is that, under the fact-a probation challenges[17] of evidence from digital records. The Indian Evidence Act, 1872 states that electronic records qualify to enter the courts of law if they satisfy the requirements of Section 65B. However, under these conditions, it requires the presentation of a certificate from the person who had control over the digital device or server. This is an impossibility in many cases, such as where the data is with third-party intermediaries beyond India or when devices have been compromised. There are no uniform standards or procedures for collection, preservation, and analysis of digital evidence by investigation authorities. Digital records have been the cause of benami acquittals or the prolongation of litigation because of the judiciary's expression of concerns on these records times without number. The value of proof of electronic evidence is also most complicated by the risk of data tampering, deepfake technologies, and digital manipulation of the metadata.

Another associated legal concern is the lack of definitions within legislation and the gaps in existing cyber laws. The Information Technology Act, 2000 has been modified to bring in recent crimes like cyber-terrorism and identity theft. Yet no mention of definitions is given for developing offences such as cryptojacking and breach of data, deepfake pornography, and synthetic identity fraud. Besides this, it lacks a skewed penalty system between minor and more severe cybercrime. The Act also talks about algorithmic bias and has withheld provisions for matters such as cyber insurance and liability for autonomous digital agents. For such loopholes in legislation, both victims and enforcement agencies are left in a haze over possible legal remedies, while offenders revel in the potentialities of grey areas in the law.[18]

Not having strong bilateral cooperation mechanisms is yet another fundamental hindrance. By their nature, cybercrimes are global, and effective enforcement requires timely availability of data, extradition of offenders, and conformity of legal standards. India is not one of the signatories to the Budapest Convention on Cybercrime, the only binding international treaty dealing with criminal activities that are affected by the Internet. Even as concerns about

[17] Ahmet Nuredini, 'Challenges in Combating the Cyber Crime' (2014) 5 *Mediterranean Journal of Social Sciences*

[18] Dharminder Kumar and others, 'Combating Cybercrime: An Analysis of National and International Legal Mechanisms' (2023) 44(6) *Tuijin Jishu/Journal of Propulsion Technology*.

sovereignty and data privacy have disallowed India from signing the convention, this absence in itself greatly hampers the bargaining power of India within the international cyber law arena. Without international binding frameworks, Indian investigators often have to endure long waits before they can access electronic records or trace the whereabouts of accused individuals on foreign soil. Informal cooperation, either through Interpol or through diplomatic channels, tends to be sluggish and inefficient, leading to highly disappointing conviction rates.

Comparative analysis has, however, shown examples in other jurisdictions, such as the USA, EU, and Singapore, that India can learn from. The United States has very solid cybercrime enforcement under its federal statutes, especially what is offered in the Computer Fraud and Abuse Act (CFAA) and Electronic Communications Privacy Act (ECPA). These three laws combined define the offenses it covers well, offer severe penalties, and give investigative tools like surveillance warrants, to say nothing of the well-trained cyber units found within the FBI and the Department of Justice. Furthermore, multiple bilateral treaties exist through which the American government can provide mutual legal assistance in addition to data exchange, thereby adding to their capability in dealing with cross-border crimes.

The European Union occupies a ground rights and harmonised approach by instruments such as the General Data Protection Regulation (GDPR) and the EU Cybersecurity Act. Such laws provide obligations to data processors besides protecting the users from regulatory oversight and penalties. Besides this, the EU has created an agency within its fold called the European Union Agency for Cybersecurity (ENISA), charged with coordination of cyber resilience initiatives across member nations. Of significance, the EU member states are also members of the Budapest Convention, thus boosting the collective capacity for international legal cooperation.

Singapore is often touted as a model of efficient governance and serves well as a study in cyber law enforcement. Singapore's Cybersecurity Act, 2018, along with the Computer Misuse and Cybersecurity Act (CMCA), clearly stipulate the law in how it applies to modern technology in action by one central agency, the Cyber Security Agency of Singapore (CSA). The country also has put in place much more that includes public-private partnerships, solid capacity building efforts, and mandatory reporting of cybersecurity incidents.[19] These elements make for a well-rounded proactive and resilient cybercrime framework. India can learn quite a few

[19] A A Khan, 'Reconceptualizing Policing for Cybercrime: Perspectives from Singapore' (2024) 13(4) Laws 44

lessons from these jurisdictions, firstly upgrade and unify definitions of cyber-crimes in legislation with the current global standards. Next, India should invest in institutional capacity development through cyber courts at central level, compulsory cyber forensics training, and building a digital architecture for law enforcement. The third step is that legal reform must go hand-in-hand with procedural ones important to making the collection of evidence streamlined, international cooperation for the same, and victim redress mechanisms. The remaining aspects of a more extensive national strategy include public awareness campaigns, cyber literacy, and private sector incentives for cybersecurity measures.

In an endnote, India's battle against cyber-crimes is crippled by jurisdictional ambiguities, evidentiary bottlenecks, archaic laws, and a lack of international cooperation. The comparative experiences from the US, EU, and Singapore make it clear that a well-coordinated rights-based technologically forward approach improves national cyber resilience to a great extent. Legal reform must be total with respect to institutional modernization and global engagement, and it must be sustained through public-private collaboration. The next and final chapter of this paper will discuss potential solutions and policy recommendations that will furnish a well-rounded roadmap toward strengthening India's cybercrime legal framework.[20]

CONCLUSION

Cyber-crimes, under a digitalizing India, pose one of the most dynamic and complex threats to an individual, organizations, and national security. The evolution of cyber threats from data breaches and identity theft to ransomware attacks and state-sponsored cyber espionage necessitates not an only strong and responsive framework but also anticipatory one. The Information Technology Act, 2000 is the basis for fighting cybercrimes, but with the rise of even more advanced cyber crimes transcending nations, its weaknesses have become prominent.

As such, the passage of the Digital Personal Data Protection Act in 2023[21] and the penal provisions surrounding this Act in the Indian Penal Code and Criminal Procedure Code indicate that the legislature is trying to get abreast of technological advancements. Again, the creation

[20] Abeer Rakesh Wasnik, 'Uncovering the Legal Challenges of Cybercrime in India and the Need for a Specific Legal Framework' (2022) 2(3) *Journal of Legal Research and Juridical Sciences* 1329.
[21] Saurabh, Shubham, 'The Digital Personal Data Protection Act of 2023: Strengthening Privacy in the Digital Age' (2024) 3 International Journal of Law in Changing World 77

of institutional mechanisms like CERT-In and police cyber cells underlines the administrative commitment to the enforcement of cybersecurity. However, the hindrances to effectiveness entailed by the jurisdictional controversy, nonunified implementation, low levels of digital literacy, lack of technical training for enforcing authorities, and a crawling judicial system continue to haunt the existing situation. In the context of a connected world, locales linked by litigant and defendant are recognized when a foreign body advances its rights against the suspect. Here, evaluations mostly discuss between the fine line of safeguarding the modern values of rights and liberty. Commonwealth intervention, for example in *Shreya Singhal versus the Union of India*, led towards defending these values in cyberspace. This would be following the lack of legislative establishment, enforcement clauses, and digital security throughout the investigation points as due process to be followed.

Cross-border cybercrimes[22] and transnational operations further impede enforcement through conflicts on jurisdiction, limited international cooperation, and the absence of universally harmonized setting of legal standards. Despite the adoption of the Budapest Convention on Cybercrime-type frameworks for multilateral partnership, the ratification process faced several hurdles within India, drawing on strategic and legal perspectives. Nonetheless, international cooperation, whether bilateral or multilateral, is crucial for investigating and prosecuting broadly prevalent cyber threats.

In a comparative light with legal regimes in the United States, United Kingdom,[23] and Singapore, India has made good strides while having a significant gap in the implementation of forward legal frameworks, imposing data security regulations, and ensuring institutional capacity. Indeed, countries[24] such as Singapore have started on significant legislation and institutional capacity-building projects that could serve as best practices for us in terms of public-private partnerships and real-time advantage.

[22] Mohammad Tarek Hasan, 'Cross-Border Cybercrimes and International Law: Challenges in Ensuring Justice in a Digitally Connected World' (2023) 8 IJRDO - Journal of Law and Cyber Crime.
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