

Cyber Laws: an Impact and Analysis of Last two Decade in India

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Abstract

We had an Experience of cyber Laws in India, which already qualified more then two decades, during last several decades since 90s we are experiencing computer, computing device and Internet. Specially by Internet a revolution came in the communication, which gives rousing growth in using internet by several devices which continuously developed by R& D according to the experience of consumers, internet reaches in every part of human life and become an essential for life, as we all experiencing that this extensive use of internet and technology has given a big canvas to the wrong doers who are doing several actions which are creating harm to the society. Therefore a legislation was needed, now we all know that Information technology Act 2000 was legislated, two decade before, since than we are experiencing the effect of this legislation, Parliament amended this in year the 2008,

The world of internet and Technology in India is continuously expending as Technology is expending, how to grab wrong actions of wrong doer is still a question because every day new wrong action comes but legislature require time to legislate law on that action within the four walls of constitution.

Key words: Cyber Laws, Information Technology Laws, Internet Laws, Communication Laws, Netizen, cyberspace, Evolution in Technology,

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I. Introduction

Even more than two decade is over to legislate Information technology Act 2000, but we are unable to grab all wrongful actions under this law. By the communication world became global village, and every aspect of life is accessible virtually. But on the other hand to live with Wong action done against individual without any remedy is painful to society. Law need to find solutions, under the four wall of constitution Legislature tried to deal with their best but the jurisprudence says you cannot make a perfect law until you are not being able to deal conflict perfectly. so the judges suggested particular statutory provision of Information Technology Act is wage, so we can't deal with error³, several rules and regulations also developed to affix liabilities, procedural Liabilities like role and duties of certifying authorities , manner of holding inquiry, role of controller, uses of electronic record , uses of digital signature , procedure and safeguard for monitoring data are some requirements which are being developed bit by bit during decades, even in last decade social media run on internet rapidly, which is being misused by wrong doer so we require more strengthen regulation on the part of evidence collection, complaint procedure, content delete, or content restrictions etc. recently Supreme court of India adjudicated, Right to be forgotten⁴, as a right to delete content from internet and fixed liability of Intermediary, therefore legislature also developed liability of intermediary under two various guideline, firstly in 2011 and now in 2021 after a decade to deal pace of internet liability.lot more development in pipeline to develop liability.

Research objective

1. To analyse the present IT Laws & regulations
2. To determine the effect of easy or unrestricted uses of internet by the people.
3. To explore various new kind of wrong action which are need to be cover by effective legislation

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³ Shreya singhal vs union of India, SC decided on 24/03/2015

⁴ X vs. union of India, 2021

Research Question

1. Whether the Present Information Technology Laws able are best to deal effective control on harmful conduct/action of the society.
2. Whether easy and unrestricted access to internet has become tutorials on cyberspace to the wrong minded people.

In contemporary world, a very famous English word is experienced by everyone i.e. cyber space and cyber world, cyber world is full of all electronic devices where optical fiber , digital signals, data bytes or such other elements like these may presume. These are helpful tools to create virtual world. While other word cyber space is virtual space where you can see many more activities but cannot touch.

Word cyber is related to computer and computing device which is used for electronic communication, cyber technology facilitate to create cyber space , which is full of various activities , which required regulations to command and manage the conduct who are experiencing the cyber world and cyber space. Therefore legislature legislated the statute time to time which is collectively known as cyber laws. So the cyber laws are regulating the conduct on cyber space , and prescribe the punishment who are committing wrong.

All the cyber world is run on special element of communication i.e. internet, which is now a days an Important tool to facilitate communication. Let us understand the process, when we do data entry at elementary level on computer or computers , this data helpful to the individual human kind because , it enhance the capacity to mingle knowledge in the form of data. When such computers connected each others becomes computer network, when such several small computer network interconnected each other a big network prepare which run through the help of internet, such network share and process such data , which may gives a result which generally out of the reach of general human capacity, and it always errorless. On this internet any person my communicate to other any time via medium of these computer or computing device communication between two person directly have no ambiguity, but communication between two person via two computer or computing device may be ambiguous which can be trusted by password protection so that we can ensure genuineness of person connected together. Passwords in computing device is helpful to recognise the people connected through device, and password is just like a key to open a lock of the computer as you opening a lock of your house , which cannot be open by any stranger until you missed or share your keys. It is special kind of security system on internet .Therefore the wrongdoer does not become able to decode your security , till then you are secured on internet. But other side of coin is that wrong doer are also roaming on internet in search of those who are not Netizen or computer sewavy they befool these newbie for getting money, invade in their bank account and so on list of new wrong action are increasing day by day.

Due to all such merit and demerit several countries legislated cyber regulations in their domestic framework based on the international instrument, India was 12th in number to legislate cyber regulations. Indian Parliament enacted Information technology Law with the object that new communication system and digital technology have change the global world where we live Therefore facilitating the Trade and business & their transactions by using electronic medium and internet they recognised electronic system as the previous and traditional paper document based system.

On the other hand The United Nations Commission on International Trade Law (UNCITRAL) by consent of all members adopted the model law on electronic commerce. In 1996 model law provides for equal treatment among the competent users of both electronic as well as traditional system. For creating equal ecosystem for all, some amendments were suggested in various existing statutes like evidence Act, IPC, Banker's Book Act, and RBI Act. Etc.

The Digital signature is a code word which can be issued by any of the two agencies which are established for this purpose, they can issue a digital signature in favour of any person certified by these agencies.

After getting certified digital signature person may use in all digital transactions and it is legitimate by this cyber legislation.

By the virtue of Information technology Act 2000 and further its amendment Act 2008, all electronic record and digital signature are legitimate.

All electronic transactions are legitimate under Information technology Law and Central Government has right as well as obligation to legislate Law on all cyber issues, Central Government can control and manage, all incidental matter which are pertain to cyber and cyber space, central government is under obligation to make appropriate Law and regulation to control the issues of cyber.

IT Act 2000 has 13 chapters in Toto, where as chapter 1st deals with 2 sections, which provides commencement and definitions which is very basic to establish understanding. Chapter 2nd deals with digital signature and electronic signature only two sections are here which are explaining the authenticating the electronic record and electronic signature, chapter 3rd deals with Electronic governance, in various sections starts from 4 to 10 A are explaining the legal recognition and uses of electronic records & electronic signature,

delivery of service by service providers electronic publications of government records , power of central government to make rules for digital signature, validity of all electronic contract as physical contract is also explained in this chapter after amendment. Chapter 4th is explaining about attribution of electronic record and Acknowledgement receipt, its place time etc. While chapter 5th is explaining Secure E-Record and Secure E-signature, chapter is explaining the procedure and practice of security., chapter 6th is dealing with regulations of certifying authorities, this chapter is speaking about appointment and functions of controller and other kind of officers Licence its renewal, rejection or suspension, including the power, its delegation, Access to computer or computing device. And other procedure also explained here which makes it very Important to deal , chapter 7th is explaining the electronic signature certificates , chapter 8th fixes the duties of subscriber, while chapter 9th is explaining the penalties compensation and adjudications, chapter 10th is speaking about Appellate Tribunal, but now repealed because in due course of time we experienced that internet is one of the mode of communication so ambiguity in cases of communication should be nullify by repealing these tribunals , now these can be deal under section 14 of telegraph Act, chapter 11th is explaining various offences , chapter 12th is explaining liabilities of intermediaries and is removal in specific cases , chapter 12 A is for examination of e-Evidences while chapter 13th is Miscellaneous. Like offences by companies power of state governments, power of controller. Etc.,

Due to IT Act 2000, wherever needed amendment done by central government time to time specially in Evidence Act 1872, Indian Penal code 1860, banker's Book Act and Reserve Bank Act. Therefore now digital signature are also legitimate and sufficient to prove it by acceptance in law, and it also improve to ambit of Law and judicial Power, rights of courts in justice delivery system is also secured so they can seek evidence u/s 65A 65B, 67 A 73A, Copyright Act 1957 is also amended according to International obligation like TRIPs, and fulfilling the requirement of Information Technology. Ministry of Information Technology has made the computer respond emergency Team (CRET) and Information Protection Technology Development council.

Provisions of IT Act 2000 seems to be like complete legislation but technological development were moving very rapidly, but the pace of legislation was not as such to deal with it, Therefore these IT Laws were insufficient to deal actions of users, In due course of time central government made several regulations and guidelines to deal substantial and procedural gaps between IT legislation and

DEVELOPMENT OF SOCIETY IN LAST TWO DECADE DUE TO EVOLUTION IN TECHNOLOGY:

1. **DEVELOPEMENT IN COMPUTING TECHNOLOGY :** Invention of computer and related technology was time turning, growth of Information Technology was a repercussion to the threat of nuclear attack during cold war, but when we start search about computing technology, we find its start from thousand years back in devises like Abacus, this abacus can be said precursor to the modern day computer, from the abacus to modern day computer or CPU, evolution can be divided in four different period of time scale ,
 - a. Pre Mechanical 3000 BC- 1450 AD,
 - b. Mechanical 1450-1840 AD,
 - c. Electromechanical 1840-1940,
 - d. Electronic 1940 to Present

Now present day every aspect of society is covered by computing technology even business facilities, electronic facilities, Business management, Engineering, Law, Judiciary, Police Administration, General Administration, Media, Communication, and many more. Now a day a new pattern is evaluating that is time bound and rapid up gradation in computing software or hardware due to the consumer friendly business which is helpful to improvement of computing technology.

2. **DEVELOPEMENT IN COMMUNICATION FIELD:** Initially communication was facilitated by the help of birds or animals then after by various kind of paper which can be written in communicating language. A time turning effect noticed when electromagnetic communication started, due to invention of Telephone whole world changed, Telegram/Telegraph etc. replaced the postal system of communication gradually. New communication device came which is known as Mobile Phone, gradually it was updated as smart phone which was a small computing device also. Some features of smart phone were based on electronic communication, and some other features of smart phone were based on Internet. Interestingly! Smart Phone can handle both that is why it was smart, Now after so many years a new artificial Intelligence Technology is ready to replace existing one.

A paradigm shift in computer programming in last two decades the first generation language replaced by second generation language, and further by third , fourth , and fifth and so on. This is moving from difficult to easier in understanding, with so many variations

3. E- BUSINESS: The whole Information Technology Act was legislate with the objective to facilitate and regulate e-business on internet, Specially two or more human are experiencing the business behaviour with fulfilling legal compliance by using computing device. Legal provisions are mentioned in IT Act 2000 if two electronic and computing devices are in business behaviour. Online shopping, online payment , online medical perception, online various kind of business activities, As the population increased in last two decade more and more facilities were required to fulfil the need being done by the help of Internet.

4. DEVELOPMENT IN FIELD OF EDUCATION: In the Field of Education Lot more development have already taken in last two decade, now computer become essential tool to disseminate information or knowledge ,Information Technology is helpful in all level of education like Primary Level education , Secondary Level education , and Higher Education, for various kinds of works, especially in mass education, distance education , Online education, various software are there to facilitate, mass education became possible in last two decade due to Internet facilities. Virtual School, Virtual College and Virtual University are good examples of this development.

5. DEVELOPMENT IN MEDIA: In its own Journey media become 4th pillar of Democracy, After print media, a new kind of media popularised known as electronic media the two different devices were become more generalised these were Radio and Television we all are evident of this evolution, but since entry of Internet revolution came in media Industry, a new form of media also entered this was social media, now every citizen is Informed citizen and every citizen is journalist to watch wrong in society. This is all developed in last two decade. Something wrong published with intention or without intention it would be responsibilities of Intermediaries, person have right to be forgotten.⁵ Freedom of speech and expression under the Law established with certain reasonable restrictions⁶. Cyber space is virtual, borderless and offers complete anonymity. Anyone can post anything on social site, but free speech and expression can enjoy only after qualifying the Article 19 (2) of the constitution of India.

6. DEVELOPMENT IN POLICE ADMINISTRATION: Due to information Technology a major change we have seen in police administration system, we have lot more computing device to assess wrong done and helping device to catch wrong doer. Now by using such technology police can put required evidences in court of Law.

7. DEVELOPMENT IN JUDICIAL ADMINISTRATION : Now each and every aspect in judicial administration is under the purview of information technology Law, litigant are now aware with cause list bit by bit in proceedings, Lawyers are also connected

8. DEVELOPMENT IN RESEARCH : Now a day computerization is so much helpful for data analysis, by which we are saving time and money, during two decades we developed lots of new software which are helpful in research and like activities, now to find out new market trends for enhancing business we require business research, these various kind of data analysis, data mining etc. are helpful to guess business trends so that new business policies can be made

9. DEVELOPMENT IN NATIONAL SECURITY : During these two decades various aspects of information technologies develops in consonant of new evolving technologies, so the central government of India is being active in their duties , presently we have National cyber security policies, it is actually a policy framework developed by department of electronics and information technology central government of India, it aims at protecting the public and private infrastructure from all kinds of cyber Attacks, policy also covers the safeguards information those who are using web for financial or banking information and sovereign data, complex cyber space environment, supported by security software for worldwide distribution of information and communication technologies , before the landmark year 2013 we do not have cyber security policy, now we developed various repositories where we collect data for further processing and rectification process, these are also comes under national securities, where lot more valuable data protected for national interest.

10. DEVELOPMENT IN FREEDOM OF INDIVIDUAL : During these two decades as the use of cyber space is increasing the matter of our privacy is of serious concern, further we have right to privacy provided by our constitution under Article 21 and free communication u/A 19 is of prime concern in present time. Even

⁵ X vs Union of India, April 2021 SC.

⁶ Shreya Singhal vs UOI, WP,Crl.167,of 2012.

different kind of privacy defined by supreme court in year 2017⁷ various kinds of privacy defined by supreme court of India in its judgement.

11. DEVELOPMENT IN USE OF TECHNOLOGY BY CRIMINAL OR INCREASE OF WHITE COLLOR CRIME : As the technology is developing the techno-savvy people who had wrong intend made benefit to ditch faith of others, therefore new kind of wrong actions were recognised even the central government tried to mitigate such situation by amending the Law or by incorporating new rules then too it is difficult to grab all wrongful action under Law or to stop them , we had collected the data and analysed by comparison in two different years of decades which is mention below in charts :-

Analysis on the basis of Data Collected⁸

TABLE ⁹			
INCIDENCE OF CASES REGISTERED UNDER CYBER CRIME IN (STATES &UT) INDIA 2002			
SL. NO.	STATES	CASE REGISTERED UNDER IT. ACT	CASE REGISTERED UNDER IPC secs
1	Andhra Pradesh	08	253
2	Arunachal Pradesh	0	0
3	Assam	02	0
4	Bihar	0	0
5	Chhattisgarh	0	0
6	Goa	04	04
7	Gujarat	01	249
8	Haryana	02	0
9	Himachal Pradesh	0	99
10	Jammu & Kashmir	01	0
11	Jharkhand	0	0
12	Karnataka	15	0
13	Kerala	03	1
14	Madhya Pradesh	0	0
15	Maharashtra	12	1
16	Manipur	0	0
17	Meghalaya	0	0
18	Mizoram	0	0
19	Nagaland	0	0
20	Orissa	4	0
21	Punjab	3	26
22	Rajasthan	0	0
23	Sikkim	0	0
24	Tamil Nadu	03	0
25	Tripura	0	0
26	Uttar Pradesh	5	81
27	Uttaranchal	0	0
28	West Bengal	0	0

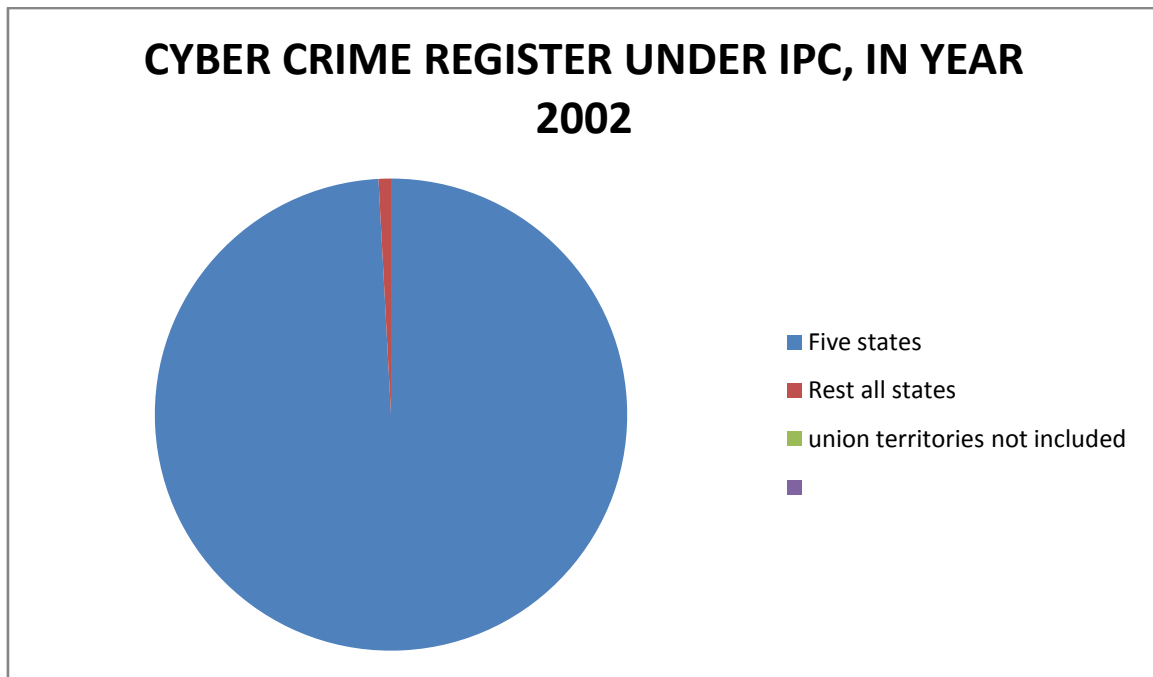
⁷ K S PuttaSwamy vs union of India, 2017 , 10 SCC 1

⁸ Ncrb provided data

⁹https://ncrb.gov.in/en/crime-in-india-table-addtional-table-and-chapter-contents?field_date_value%5Bvalue%5D%5Byear%5D=2000&field_select_table_title_of_crim_value=20&items_per_page=10

	TOTAL STATES	63	714
	UNION TERRITORIES		
29	A & N Island	0	15
30	Chandigarh	02	0
31	D & N Haveli	0	0
32	Daman & Diu	0	7
33	Delhi	5	2
34	Lakshadweep	0	0
35	Pondicherry	0	0
	Total UTs	07	24
	Total All India	70	738

National Crime Record Bureau provided this data on their website which they recorded state wise & Union Territories wise in which they mentioned that less than 10 crime registered under Information technology Act 2000 while five states i. e. Andhra Pradesh ,Gujarat, Himachal Pradesh Punjab, and Uttar Pradesh, hold 99.15 % registered cyber cases under IPC where Internet or electronic device used as a tool of crime. In my personal view there may be the reason that it was very early time to understand in society that what is the procedure to register and where they can be register.



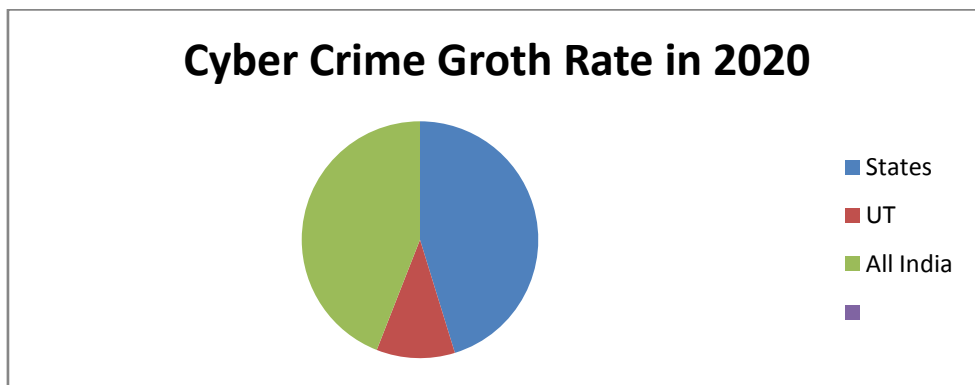
Indian Society was not aware as such that in technological changes may be used as a weapon of crime against them, and further they only know about IPC as a substantive Law available for them so we find such crime treated under Indian Penal Code, 1860.

TABLE ¹⁰							
Cyber Crime (State / Union Terretory wise) 2018-2020							
Sl.no.	State /UT	2018	2019	2020	Mid year Projected Population (in Lakhs)	Rate of total cyber crime In (2020)	Chargesheetin g Rate (2020)
	STATE						
1	Andhra Pradesh	1207	1886	1899	526	3.6	40.1
2	Arunachal Pradesh	7	8	30	15.2	2.0	33.3
3	Assam	2022	2231	3530	347.9	10.1	19.4
4	Bhiar	374	1050	1512	1219.0	1.2	65.0
5	Chhattisgarh	139	175	297	292.4	1.0	87.4
6	Goa	29	15	40	15.5	2.6	50.0
7	Gujrat	702	784	1283	691.7	1.9	47.1
8	Haryana	418	564	656	292.1	2.2	49.6
9	Himachal Pradesh	69	76	98	73.6	1.3	41.9
10	Jharkhand	930	1095	1204	381.2	3.2	53.0
11	Karnataka	5839	12020	10741	665.0	16.2	72.9
12	Kerala	340	307	426	353.7	1.2	70.6
13	Madhya Pradesh	740	602	699	837.6	0.8	85.6
14	Maharashtra	3511	4967	5496	1236.8	4.4	27.1
15	Manipur	29	4	79	31.4	2.5	0.0
16	Meghalaya	74	89	142	32.6	4.4	1.4
17	Mizoram	6	8	13	12.1	1.1	57.1
18	Nagaland	2	2	8	21.8	.4	-
19	Odisha	843	1485	1931	454.7	4.2	33.5
20	Punjab	239	243	378	301.8	1.3	62.4
21	Rajasthan	1104	1762	1354	786.1	1.7	26.8
22	Sikkim	1	2	0	6.7	0.0	-
23	Tamil Nadu	295	385	782	761.7	1.0	53.1
24	Telangana	1205	2691	5024	375.4	13.4	42.5
25	Tripura	20	20	34	40.4	0.8	26.3
26	Uttar Pradesh	6280	11416	11097	2289.3	4.8	49.9
27	Uttrakhand	171	100	243	113.1	2.1	63.0
28	West Bengal	335	524	712	977.2	0.7	45.9
	TOTAL STATES	26931	44511	49708	13151.8	3.8	47.5
	UNION TERRITORIES	2018	2019	2020	Midyear Projected Population (in Lakhs)	Rate of total cyber crime In (2020)	Charge sheeting Rate (2020)
29	A & N Island	7	2	5	4.0	1.3	
30	Chandigarh	30	23	17	12.0	1.4	
31	D & N Haveli and	0	3	3	10.4	0.3	

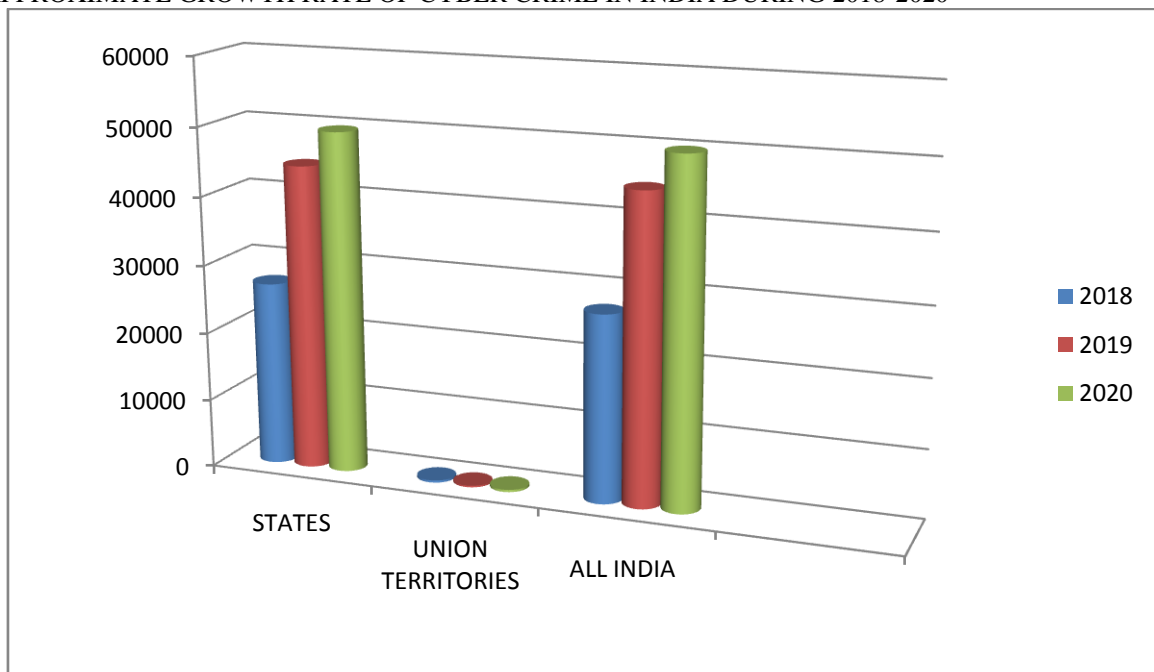
¹⁰[https://ncrb.gov.in/sites/default/files/crime in india table additional table chapter reports/TABLE%209A.1.pdf/2018-20](https://ncrb.gov.in/sites/default/files/crime%20in%20india%20table%20additional%20table%20chapter%20reports/TABLE%209A.1.pdf/2018-20)

	Daman & Diu [@]						
32	Delhi	189	115	168	203.2	0.8	
33	Jammu & Kashmir [@]	73	73	120	133.4	0.9	
34	Ladakh [@]	-	-	1	3.0	0.3	
35	Lakshadweep	4	4	3	.7	4.4	
36	Puducherry	14	4	10	15.5	0.6	
	TOTAL (UTs)	317	224	327	382.1	0.9	
	TOTAL ALL INDIA	27248	44735	50035	13533.9	3.7	

- Crime rate is calculated as crime incidence per Lakh of Population
- Population Source : Report of technical group on population projection (July 2020) national commission on population
- @ Data of newly created Union Territories
- # Source of data: National Crime Record Bureau, Delhi



APPROXIMATE GROWTH RATE OF CYBER CRIME IN INDIA DURING 2018-2020



During this three year shows the Crime rate enhanced in whole India and its every state and union territories.

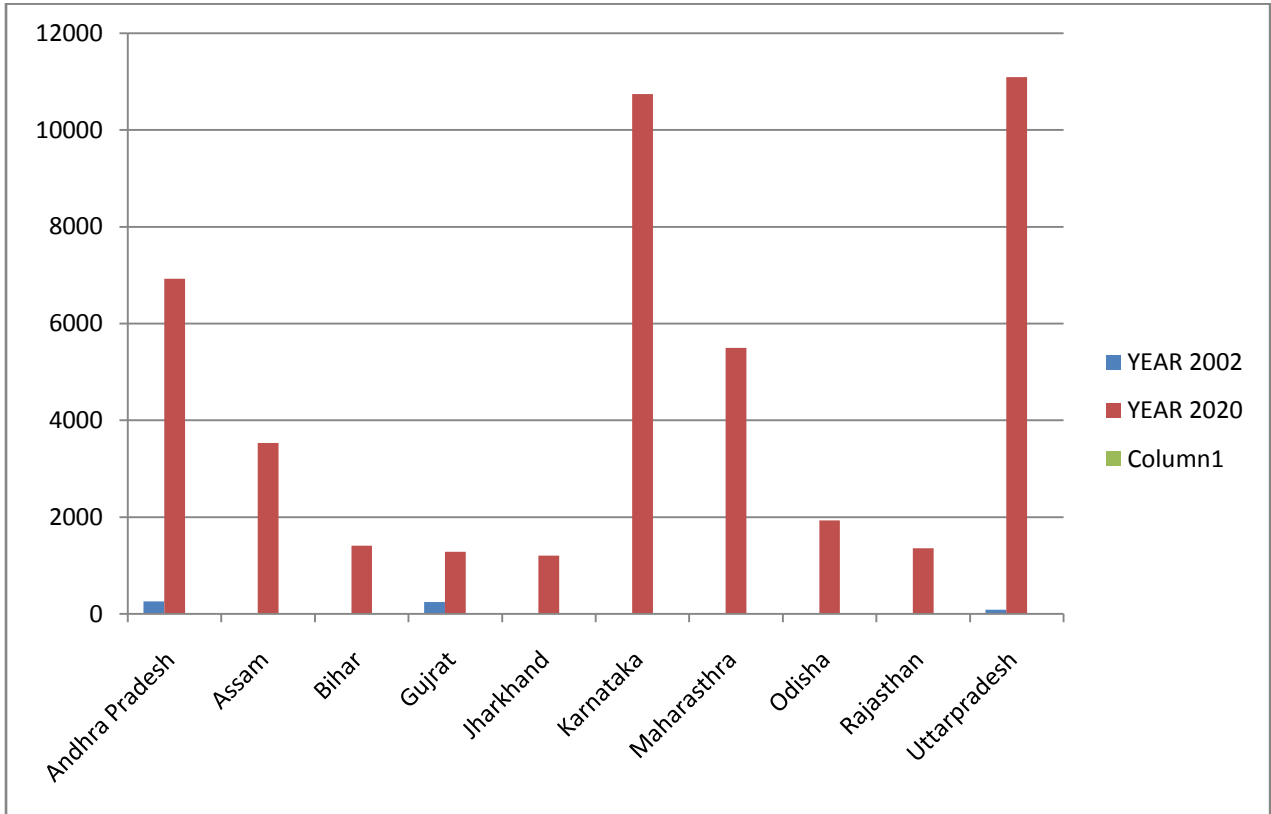
TABLE-2 ¹¹			
COMPARITIVE GROWTH OF REGISTERED CYBER CRIME IN YEAR 2002 & 2020 ¹²			
SL. NO.	STATES	Registered Cyber Crime in 2002	Registered Cybwe Crime in 2020
1	Andhra Pradesh (+Telangana)	261	6923
2	Arunachal Pradesh	0	30
3	Assam	02	3530
4	Bihar	0	1512
5	Chhattisgarh	0	297
6	Goa	08	40
7	Gujarat	250	1283
8	Haryana	02	656
9	Himachal Pradesh	99	98
10	Jammu & Kashmir*	1	*
11	Jharkhand	0	1204
12	Karnataka	15	10741
13	Kerala	04	426
14	Madhya Pradesh	0	699
15	Maharashtra	13	5496
16	Manipur	0	79
17	Meghalaya	0	142
18	Mizoram	0	13
19	Nagaland	0	8
20	Orissa	4	1931
21	Punjab	29	378
22	Rajasthan	0	1354
23	Sikkim	0	0
24	Tamil Nadu	03	782
25	Tripura	0	34
26	Uttar Pradesh	86	11097
27	Uttaranchal	0	243
28	West Bengal	0	712
	TOTAL STATES	777	49708
	UNION TERRITORIES		
29	A & N Island	15	5
30	Chandigarh	02	17
31	D & N Haveli and Daman & Diu	7	3
32	Delhi	7	168
33	Lakshadweep	0	3
34	Pondicherry	0	10
35	Jammu & Kashmir and Ladakh	-	121
	Total UTs	31	327

¹¹<https://ncrb.gov.in>,

¹²SOURCE NCRB

	Total All India	847	

COMPARATIVE CHART OF STATES WHERE MORE THAN 1000 CYBER CRIME REGISTERED IN THE YEAR 2020

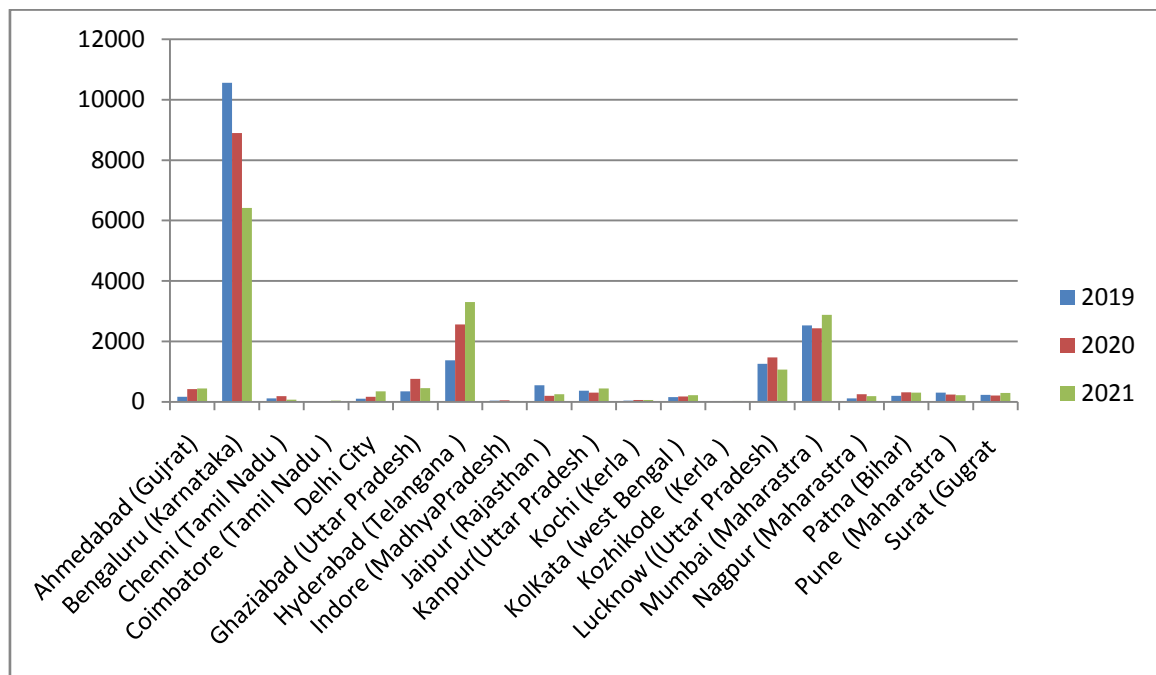


Note : Andhra pradesh included Telangana

As the urbanization is increasing and global communication is also expanding due to all this cyber crime is also increasing.

Major contribution of cyber crime in India by its metropolitan, which is reported in NCRB report in year 2021, which percolates in their states

CYBER CRIME IN METROPOLITAN CITIES OF INDIA



Firstly Bengaluru is at the top, followed by Hyderabad and Mumbai in cyber crime in India since last three years of Pandemic.

Secondly in the pandemic growth rate of cyber crime was increasing rapidly, most of the cases of identity theft were noted in Bengaluru which were followed by Kanpur.

Major contribution of cyber crime was noted in three metropolitan cities i.e. Bengaluru, Hyderabad and Mumbai. While rest from the other 16 metropolitan cities.

II. Conclusion & Suggestions:

After Analysis we can conclude that due to Development of Technology continuously, Law has no grave Impact on Cyber related wrong-full actions, reason behind every new day exposes the new type of cyber wrong, therefore we can say that pace of development in technology is at higher side, while pace of legislation at lower side, due to this mismatch we are not being perfect to resolve the need of society. Therefore Law must take the help of Technology to grab upcoming wrongful actions when new technology evolved/emerged, legislation should broadly need to be imposed the **jurisprudence of care** while handling new technology, i.e. We must allow all possible consequences of wrong if person not doing care of others (who may be victim of wrong handling of technology) , this may be understand by the theory of pain & pleasure.

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