

# STATISTICS OF CYBER CRIME IN INDIA: AN OVERVIEW

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#### ABSTRACT:

Nowadays cyber crime is the most concerning issue for all developed and developing countries ,because it harm governmental confidential data as well as people in daily life transactions. In this paper I had covered some type of cyber crime with the help of print and electronic media by quoting some current cases happened related to cyber crime. In next section, statistics of crime cases are discussed which were happened in last few years and compared crimes happened in 2012 with previous years and also discussed what type of crimes are on increase and decrease.

#### **1.INTRODUCTION**

In 1960s internet was developed for better communication and research. With advancement of technology and expansion of internet every area becomes easy to access but it also provide a pathway to commit crimes easily without any effort only sitting on a system.

Some human minds of criminal nature use internet as a tool of crime which is now known as cyber crime committed in cyber space. Cyber crime is now the burning issue for all countries to handle because most of data is transferred online even governmental data also. Cyber crime term is used to describe criminal activity in which computer or computer network are a tool or target of criminal activity to denial of service attack. It also include traditional crime in which computer are used. Cyber crime mainly consist of unauthorized access to Data and data alteration, data destruction, theft of funds or intellectual property. Due to these online criminal activities cyberspace is most unsafe place to do business. Word cyber space was first used by William Gibson, in his book, Necromancer, written in 1984. Cyberspace can be defined as a virtual world of computers where internet is involved, where individuals can interact, conduct business, do transactions, develop graphics.

In this paper I will discuss many types of cyber crime commonly committed with some current case happened in various cities. I will also discuss statics

of crimes committed and criminals arrested in various cases.

#### 2. CURRENT OCCURING CRIME NEWS

Many of us are not aware of the terms used for crime like stalking, phishing, vishing, bot networks, XSS etc. although we know nature of crime.

#### 2.1 Stalking:

Cyber stalking is one of the most common crime which are commenced on internet the modern world. Cyber stalking is use of the Internet or other electronic means to stalk someone. This term is used interchangeably with online harassment and online abuse. Stalking generally involves harassing or threatening behavior repeatedly such as following a person, appearing at a person's home or place of business, making harassing phone calls, leaving written messages or objects, or Vandalizing a person's property. Cyber stalkers use websites, chat rooms, discussion forums, open publishing websites (e.g. blogs and Indy media) and email to stalk victim.

First stalking case registered in India:

The Delhi Police registered India's First Case of Cyber stalking. One Mrs. Ritu Kohli complained to the police against a person who was using her identity to chat over the Internet at the website www.mirc.com, mostly in the Delhi channel for four consecutive days. Mrs. Kohli further complained that the person was chatting on the Net, using her name and giving her address and was talking obscene language. The same person was also deliberately giving her telephone number to other chatters encouraging them to call Ritu Kohli at odd hours. Consequently, Mrs Kohli received almost 40 calls in three days mostly at odd hours from as far away as Kuwait, Cochin, Bombay and Ahmedabad. The said calls created havoc in the personal life and mental peace of Ritu Kohli who decided to report the matter.

## Report by Pawan Duggal, Cyberlaw consultant, president, cyberlaws.net

#### 2.2 Hacking.

"Hacking" is a crime, which entails cracking systems and gaining unauthorized access to the data stored in them. Hacking could be done easily by using Trojan horse virus. Cases of hacking reported in 2011 was 157 and reported in 2012 was435 thereby % variation in increase in cases over 2011 is 177.1%.

Case related to hacking reported:

MUMBAI: Cyber criminals hacked into the Mumbai-based current account of the RPG Group of companies and shifted Rs 2.4 crore recently. The bank has blocked the accounts of the illegal beneficiaries, but the hackers have already managed to withdraw some funds from them, sources said.

Investigators said the cyber criminals followed a similar procedure to the one executed on January 31 when Rs 1 crore was siphoned off in Mulund from the current account of a cosmetics company. "Prima facie, the company officials may have responded to a Trojan mail sent by the fraudsters. The hacker then probably got the group's current account username and password when officials logged in," said an investigator. The arrested men said they allowed their bank accounts to be used for in return commission. a good A case has been filed under sections of the Indian Penal Code and IT Act. Investigators have also sought details from the bank on whether it has followed the Know Your Customer norms.

Times of India," Mumbai bank hacked, Rs 2.4 crore siphoned off in 3 hours ", May 18, 2013

#### 2.3Phishing

Phishing is just one type of the many frauds on the Internet, trying to fool people into parting with their money. Phishing refers to the receipt of unsought emails by customers of financial institutions, asked them to enter their username, password or other personal information to access their account for some reason. Customers are directed to a Website which could be fraud copy of the original institution's website when they click on the links on the email to enter their information, and so they remain unaware that the fraud has occurred. The criminal then has access to the customer's online bank account and to the funds contained in that account number.

Case related to phishing:

#### HYDERABAD:

An email allegedly from India's central bank, asking to secure their bank account details with the RBI is fake, and an attempt by new-age fraudsters to con people into giving away bank account details and lose hard-earned money, security experts said.

The email says RBI has launched a new security system, asking users to click on a link to open a page with list of banks in place. Once anyone chooses a particular bank, it asks for all net banking details, including card numbers and the secret three digit CVV number. among others. "The email is so neat and I for once was thrilled that RBI is taking such a big step to ensure security of people. But at the advice of a friend, I checked with the police and learned that I would have lost all my savings to this racket," K Manoj, a resident said.

RBI is cautioning people that the central bank, which controls the monetary policy of the Indian rupee, "has not developed any such software and nor has it sent any such mail asking online banking customers to update their account details to secure their online accounts."The RBI does not even have any mail id with extension@rbi.com, the central bank says.

Times of India, "Now, a phishing email in the name of RBI", may14, 2013.

#### 2.4 Vishing

The name comes from "voice," and "phishing," Vishing is the act of using the telephone in an attempt to scam the user.

Which is, of course, the use of spoofed emails designed to trap targets into clicking malicious links that leads to a toll free number?

Instead of email, vishing generally relies on automated phone calls, which instruct targets to provide account numbers for the purpose of financial reward.

#### How vishing scams work:

Criminals set up an automated dialing system to text or call people in a particular region or area code (or sometimes they use stolen customer phone numbers from banks or credit unions). The victims receive messages like: "There's a problem with your account," or "Your ATM card needs to be reactivated," and are directed to a phone number or website asking for personal information. Sometimes criminal quote some information about your account before asking you to enter information, so you could believe its an authenticated source.

Sometimes, if a victim logs onto one of the phony websites with a Smartphone, they could also end up downloading malicious software that could give criminals access to anything on the phone.

#### 2.5 Squatting

Cyber squatting is the act of registering a famous domain name and then selling it for a fortune. This is an issue that has not been tackled in IT act 2000.

As, The Gap, Inc. has filed a cyber squatting case against TheGap.com under the Anticybersquatting Consumer Protection Act (ACPA). The complaint alleges that The Gap.com redirects visitors to websites that are designed to deceive consumers into believing the sites belong to The Gap, Inc." or are affiliated with or sponsored by" The Gap, Inc.

ACPA- Anticybersquatting Consumer Protection Act.

The Hindu, "a new squatting case registered under ACPA", February 13th, 2013

#### 2.6 Bot networks

A cyber crime called 'Bot Networks', where spamsters and other perpetrators of cyber crimes remotely take control of computers without the users realizing the fact that their system is being in use by some fake user.

#### 2.7 Cross Site Scripting (XSS)

Cross site scripting Cross-site scripting (XSS) is a type of computer security threat in which malicious users insert

Statics of cases registered and persons arrested in 2011 and 2012 under IT act 2000

some harmful code into the WebPages of trusted web sites viewed by other users.

These were some types discussed but there are many more sides of cyber crimes which falls under IT act 2000 and IPC like obscene publication, obtaining license of digital signature by providing false information, breach of privacy, offence against public servant, forgery, criminal breach of trust and many more. Detail of each n every crime will be beyond the limit of this paper.

#### EVALUATION OF **STATISTICS** 3. OF **CRIMES COMMITTED** IN LAST FEW YEARS AND 2012.

NCRB divides the statics under two categories:

- 1) Crimes registered under IT act 2000.
- 2) Crimes registered under Indian Panel Code(IPC).

#### 3.1 crimes under IT Act:

Information on various crimes registered under IT Act 2000 is presented in Table 1

| Sr.  |  | Cases Registered |              | % Persons Arrested   |           | %          |                      |   |
|------|--|------------------|--------------|----------------------|-----------|------------|----------------------|---|
| n0   | Crime types  |                  |              | Variation<br>in 2012 | 2011      | 2012       | variation<br>in 2012 |   |
|      |  | 2011             | 2012         | over2011             |           |            | over<br>2011         |   |
|      | Tampering computer source documents  | 94               | 161          | 71.3                 | 66        | 104        | 57.6                 | these 2,876 crimes  |
|      | Hacking<br>1.loss/damage to computer source<br>2.hacking                         | 826<br>157       | 1,440<br>435 | 74.3<br>177.1        | 487<br>65 | 612<br>137 | 25.7<br>110.8        | reported most<br>of the cases<br>are of<br>tampering<br>computer<br>source (1,440)<br>and hacking<br>of data (435).<br>Variation in |
|      | Obscener publication in electronic form  | 496              | 589          | 18.8                 | 443       | 497        | 12.2                 |   |
|      | Unauthorized attempt to access to protected computer system                      | 5                | 3            | -40.0                | 15        | 1          | -93.3                |   |
|      | Obtaining license or digital signature certificate by misrepresentation of facts | 6                | 6            | 0.0                  | 0         | 5          | -                    |   |
|      | Publishing false digital signature   | 3                | 1            | -66.7                | 1         | 0          | -100.0               |   |
|      | Breach of confidentiality  | 26               | 46           | 76.9                 | 27        | 22         | -18.5                | tempering<br>data over  |
|      | Fraud digital signature certificate/privacy                                      | 157              | 176          | 12.1                 | 68        | 134        | 97.1                 | 2011 is 74%   |
| Sour | others   | 157              | 176          | 12.1                 | 68        | 134        | 7.1                  | and hacking is 177.1% which   |

Table 1. Cases registered and persons arrested in 2011 and 2012 under IT act 2000.

Source : NCRB report

As with technology advance criminal minds are also getting activated more and more. According to NCRB report increase percentage in crimes of All type committed in 2011 and committed in 2012 is 60%.

A total crime reported under IT act was 1, 791 in 2011 and crimes reported in 2012 are 2,786. Among

is almost double and is alarming issue to concentrate. Crime cell is also working its level best as persons arrested in 2011 for hacking crime was 65 and in 2012 are 137 for total 435 cases recorded. But there is also little bit relief because the cases registered under categories of un-authorized attempt to access protected computer system decreases by 40% and decrease in cases registered under publishing false digital signature certificate, fraud digital signature certificate are -66.7% and -16.7% respectively. Although there is decrease in cases registered in above mentioned three categories but offenders are sharper as persons arrested under category of unauthorized attempt to access computer system in 2011 were 15 for 5 cases registered but in 2012 persons arrested for same

category were 1 for 3 cases registered. No person was arrested for publishing false digital signature certificate

for one case registered under IT act 2000.Total cases registered under IT act 2000 was 2,876 in 2012. When state wise observations was carried out Maharashtra state was on first place where 471 cases was registered followed by Andhra Pradesh(429), Karnataka(412), Kerala(269) and Uttar Pradesh(205) cases was registered.

Number of loss/damage to computer resources and hacking cases is almost 50% of total cases. In Andhra Pradesh (292) cases was registered, Karnataka (219), Maharashtra (192), West Bengal (101).

If I discuss about persons arrested in various crime cases total 1,552 persons was arrested under IT act 2000 as compared to 1,184 persons arrested in 2011. So increase in percentage over 2011 is 28.5%. among 1,552 persons arrested 324 were from Maharashtra.

Andhra Pradesh (170). Maximum number was reported from these two states.

**3.2 Cases registered under IPC (Indian Panel Code):** Indian panel code is main criminal code. In IPC all the crimes are listed out which a criminal suppose to commit. Any person is punishable under IPC expect military and armed forces crimes. Cyber crimes which are not covered under IT act 2000 are registered under IPC. Information of cases registered under IPC is provided in Table 2.

| Criminal breaches of trust/ fraud as in 2011 ca |                                    |                  |      |           |                  |      |           |  |  |
|---|------------------------------------|------------------|------|-----------|------------------|------|-----------|--|--|
| Sr.   |                                    | Cases Registered |      | %         | Persons Aressted |      | %         | were 118 but   |  |
| n0  | Crime types                        |                  |      | Variation |                  |      | variation | in 2012 were   |  |
|   |                                    |                  |      | in 2012   | 2011             | 2012 | in 2012   | 282.   |  |
|   |                                    | 2011             | 2012 | over2011  |                  |      | over      | Among the  |  |
|   |                                    |                  |      |           |                  |      | 2011      | states   |  |
|   | Offence by /against public servant | 7                | 2    | -71.4     | 3                | 4    | 33.3      | Haryana  |  |
|   | False electronic servant           | 1                | 4    | 300.0     | 1                | 2    | 100.0     | reported<br>maximum<br>number of<br>cases (116)<br>out of 601<br>followed by |  |
|   | Destruction of electronic evidence | 9                | 9    | 0.0       | 10               | 16   | 60.0      |  |  |
|   | Forgery                            | 259              | 259  | 100.0     | 277              | 263  | -5.1      |  |  |
|   | Criminal breach of trust/fraud     | 118              | 282  | 139.0     | 129              | 215  | 66.7      |  |  |
|   | Counterfeiting                     |                  |      |           |                  |      |           | West Bengal  |  |
|   | 1.property mark                    | 6                | 21   | 250.0     | 8                | 13   | 62.5      | (113),   |  |
|   | 2.tampering                        | 5                | 19   | 280.0     | 7                | 26   | 271.4     | Maharashtra  |  |
|   | 3.currency/stamps                  | 17               | 5    | -70.6     | 11               | 10   | -9.1      | (90) cases   |  |
|   | Total                              | 422              | 601  | 42.4      | 446              | 549  | 23.1      | registered.  |  |

Table 2. Cases registered and persons arrested in 2011 and 2012 under IPC.

Source: NCRB report

In 2012 total cases registered under IPC section were 601 under by reporting variation of 42.2 % over 2011, as the cases reported in 2011 were 422.

Among total 601 cases registered maximum cases

cases registered 549 criminal were arrested in 2012 under IPC among which 263(47.5%) offenders were arrested for crime under "cyber forgery", criminals arrested for breach of trust were 215(39.2%). The states which reports highest arrest rate were Maharashtra(83),Uttar Pradesh (73), Andhra Pradesh (69) and Madhya Pradesh (45).

#### 4. CONCLUSIONS:

In cyberspace, cyber crime replace the bytes with bullets. Many of the news From the above study the cases which are high in number are hacking and obscene publication under IT act 2000 and under IPC cases are of forgery. Hacking is the thing which need more concentration because most of data need security. Next work will focus on the solutions of preventing data from unauthorized attacks.

were of criminal breach of fraud/ trust (282) followed by cases of forgery (259). if I talk about nature of

crimes that are increased at alarming rate ,maximum increase is in cases of In 2012 total cases registered under IPC were 601 which is 42.4% increase over 2011. For total 601

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