

Introduction to Cyber Crime

The first recorded cyber crime took place in the year 1820! That is not surprising considering the fact that the abacus, which is thought to be the earliest form of a computer, has been around since 3500 B.C. in India, Japan and China. The era of modern computers, however, began with the analytical engine of Charles Babbage.

In 1820, Joseph-Marie Jacquard, a textile manufacturer in France, produced the loom. This device allowed the repetition of a series of steps in the weaving of special fabrics. This resulted in a fear amongst Jacquard's employees that their traditional employment and livelihood were being threatened. They committed acts of sabotage to discourage Jacquard from further use of the new technology. This is the first recorded cyber crime!

Today computers have come a long way, with neural networks and nano-computing promising to turn every atom in a glass of water into a computer capable of performing a Billion operations per second.

Cyber crime is an evil having its origin in the growing dependence on computers in modern life. In a day and age when everything from microwave ovens and refrigerators to nuclear power plants is being run on computers, cyber crime has assumed rather sinister implications. Major cyber crimes in the recent past include the Citibank rip off. US \$ 10 million were fraudulently transferred out of the bank and into a bank account in Switzerland. A Russian hacker group led by Vladimir Kevin, a renowned hacker, perpetrated the attack. The group compromised the bank's security systems. Vladimir was allegedly using his office computer at AO Saturn, a computer firm in St. Petersburg, Russia, to break into Citibank computers. He was finally arrested on Heathrow airport on his way to Switzerland

Defining Cyber Crime

At the onset, let us satisfactorily define "cyber crime" and differentiate it from "conventional Crime". Computer crime can involve criminal activities that are traditional in nature, such as theft, fraud, forgery, defamation and mischief, all of which are subject to the Indian Penal Code. The abuse of computers has also given birth to a gamut of new age crimes that are addressed by the Information Technology Act, 2000.

Defining cyber crimes, as "acts that are punishable by the Information Technology Act" would be unsuitable as the Indian Penal Code also covers many cyber crimes, such as email spoofing and cyber defamation, sending threatening emails etc. A simple yet sturdy definition of cyber crime would be "unlawful acts wherein the computer is either a tool or a target or both".

Let us examine the acts wherein the computer is a tool for an unlawful act. This kind of activity usually involves a modification of a conventional crime by using computers. Some examples are:

Financial crimes

This would include cheating, credit card frauds, money laundering etc. To cite a recent case, a website offered to sell Alphonso mangoes at a throwaway price. Distrusting such a transaction, very few people responded to or supplied the website with their credit card numbers. These people were

actually sent the Alphonso mangoes. The word about this website now spread like wildfire. Thousands of people from all over the country responded and ordered mangoes by providing their credit card numbers. The owners of what was later proven to be a bogus website then fled taking the numerous credit card numbers and proceeded to spend huge amounts of money much to the chagrin of the card owners.

Cyber pornography

This would include pornographic websites; pornographic magazines produced using computers (to publish and print the material) and the Internet (to download and transmit pornographic pictures, photos, writings etc). Recent Indian incidents revolving around cyber pornography include the Air Force Balbharati School case. A student of the Air Force Balbharati School, Delhi, was teased by all his classmates for having a pockmarked face. Tired of the cruel jokes, he decided to get back at his tormentors. He scanned photographs of his classmates and teachers, morphed them with nude photographs and put them up on a website that he uploaded on to a free web hosting service. It was only after the father of one of the class girls featured on the website objected and lodged a complaint with the police that any action was taken.

In another incident, in Mumbai a Swiss couple would gather slum children and then would force them to appear for obscene photographs. They would then upload these photographs to websites specially designed for paedophiles. The Mumbai police arrested the couple for pornography.

Sale of illegal articles

This would include sale of narcotics, weapons and wildlife etc., by posting information on websites, auction websites, and bulletin boards or 167 simply by using email communication. E.g. many of the auction sites even in India are believed to be selling cocaine in the name of 'honey'.

Online gambling

There are millions of websites; all hosted on servers abroad, that offer online gambling. In fact, it is believed that many of these websites are actually fronts for money laundering.

Intellectual Property crimes

These include software piracy, copyright infringement, trademarks violations, theft of computer source code etc.

Email spoofing

A spoofed email is one that appears to originate from one source but actually has been sent from another source. E.g. Pooja has an e-mail address pooja@asianlaws.org. Her enemy, Sameer spoofs her e-mail and sends obscene messages to all her acquaintances. Since the e-mails appear to have originated from Pooja, her friends could take offence and relationships could be spoiled for life.

Email spoofing can also cause monetary damage. In an American case, a teenager made millions of dollars by spreading false information about certain companies whose shares he had short sold. This misinformation was spread by sending spoofed emails, purportedly from news agencies like

Reuters, to share brokers and investors who were informed that the companies were doing very badly. Even after the truth came out the values of the shares did not go back to the earlier levels and thousands of investors lost a lot of money.

Forgery

Counterfeit currency notes, postage and revenue stamps, mark sheets etc can be forged using sophisticated computers, printers and scanners. Outside many colleges across India, one finds touts soliciting the sale of fake mark sheets or even certificates. These are made using computers, and high quality scanners and printers. In fact, this has becoming a booming business involving thousands of Rupees being given to student gangs in exchange for these bogus but authentic looking certificates.

Cyber Defamation

This occurs when defamation takes place with the help of computers and / or the Internet. E.g. someone publishes defamatory matter about someone on a website or sends e-mails containing defamatory information to all of that person's friends.

In a recent occurrence, Surekha (names of people have been changed), a young girl was about to be married to Suraj. She was really pleased because despite it being an arranged marriage, she had liked the boy. He had seemed to be open-minded and pleasant. Then, one day when she met Suraj, he looked worried and even a little upset. He was not really interested in talking to her. When asked he told her that, members of his family had been receiving e-mails that contained malicious things about Surekha's character. Some of them spoke of affairs, which she had had in the past. He told her that, his parents were justifiably very upset and were also considering breaking off the engagement. Fortunately, Suraj was able to prevail upon his parents and the other elders of his house to approach the police instead of blindly believing what was contained in the mails.

During investigation, it was revealed that the person sending those e-mails was none other than Surekha's stepfather. He had sent these e-mails so as to break up the marriage. The girl's marriage would have caused him to lose control of her property of which he was the guardian till she got married.

Another famous case of cyber defamation occurred in America. All friends and relatives of a lady were beset with obscene e-mail messages appearing to originate from her account. These mails were giving the lady in question a bad name among her friends. The lady was an activist against pornography. In reality, a group of people displeased with her views and angry with her for opposing them had decided to get back at her by using such underhanded methods. In addition to sending spoofed obscene e-mails they also put up websites about her, that basically maligned her character and sent e-mails to her family and friends containing matter defaming her.

Cyber stalking

The Oxford dictionary defines stalking as "pursuing stealthily". Cyber stalking involves following a person's movements across the Internet by posting messages (sometimes threatening) on the bulletin boards frequented by the victim, entering the chat-rooms frequented by the victim, constantly bombarding the victim with emails etc.