History of Cyber Crimes: Facts which are still unknown

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***Abstract*— The invention of computers in today's world have built the existence of human easier, it has been used for various purposes starting from the private individuals to the global companies and organizations across the world. In simple terms if one must define the computers, it can be described it as the electronic device which can sores the information and process it according to the requirements of consumer. However, some persons are giving the machine wrong instructions to process for their own benefits or for the other benefits which leads to the crime in digital era. These all crimes are known as the crimes of virtual which are simply known as the activities which are illegal in the society. Cyber Crime are the crimes which are dedicated committed by means of PC, PC links that are mainly use in the digital space mainly accompanied by the Internet. In another instance, Cyber Law is not given anywhere, and the rule which applied on the virtual reality. These are the rules which applied on the zone of virtual. Cyber-crimes, Digital signatures, Electronic evidence are all comes under the category of Cyber Law. The Digital era has invented a new thing what we called today is cyber-crimes, a new type of committed offences where all these crimes depends on only one thing that is individual involvement and capacity to do the crime in virtual cyber world. Both the crimes of cyber world and another crime which are customary includes these crimes.**

***Keywords*—** Cyber Crime, Digitalisation, History, Offense, Development

I. INTRODUCTION

The new introduced crime which are emerging in the category of crimes are cyber-crime. These crimes are expanding rapidly in the global scenario of computers. The greed of the people has increased to do any offence and perform any act to satisfy their needs due to easy access of the Internet. The need can be of any type psychological or physiological. One person can see many products in the televisions, hoardings, or any commercial website. Many celebrities are promoting the things as they are evolving into representative of foreign country. These advertisements are repetitive so much on the Internet, hoardings, and the advertisement world that every name of the product are constantly clicks on the minds of the people. So, what happens if these products are not seen in the digital era or anywhere else, it automatically lowers downs the demand of the product from the market and the people start forgetting about the product. This same thing is happening with the cyber-crimes in India. India is known as the mobile phone producer and China counted as second rank in the global world. India claims the first place with 294 million users ahead after USA and these number are also increasing in terms of What's App users and Twitter users. These number are increasing per second in India as well as outside in other countries. But one of the problem in this is that as the many people are increasing in the cyber world, cyber-crime cells are only one or two in each state which creates the problem to the officials to handle the crimes and moreover it is unfortunate to see that the government policy to use these cells to solve the cyber-crime cases are neglected by the officials as they are using it to solve the criminal cases which automatically kills the basic purpose of using cyber-crime cells. Teenagers are becoming more prone to the addiction of the Internet using and they are becoming the victims of the Internet more easily. They are becoming the sufferer of collectivism very easily. The sense of belongingness from We versus I is fundamental in this age group especially. In China, rights of the individual are the concept of foreign to the Chinese tradition. The essential thing which they attain is the unity rather than many hardships. So, for the efficient control on the frauds and the crimes occurred, one should have the approach of the Chinese because the highest social ideal in China is order. Media of the Social sites is that gift which is gifted to India from western countries. The powerful country like USA are not able to control the crimes of cyber in their own country. Even though the rules and regulations of the western countries are extremely strict but still cyber-crime is that field of the Internet in which tracing of the main culprit is difficult.[1]

II REVIEW OF LITERATURE

The review of Literature plays an important role in any work which are researched properly by the researcher. Under this topic, an attempt has been made to review the literature which are available and put some efforts for the meaningful research work. The researcher finds few books, journals, articles related to this topic. Much credit is to be given to those whose work not only makes the students understand about the topic but also clears the basis of the related subject.

Chitralekha Gurumurthy (2015) in her book laid the foundation of Information Technology which starts from the basic. This book outlines the basic understanding of the framework which a common student can understand in basic language in high school. Computers which are now-a days widens the scope of things in every field right from the education, entertainment to the world of virtual space.

Farooq Ahmad (2015) in his classical work critically examines the provisions of Information Technology Act analyses the scope of electronic commerce in the light of the IT Act and Indian Contract Act examines interplay of domain name Disputes and Trademark law, service provider liability for copyright infringement, defamation and pornography and Cyber Crime.

Pavan Duggal (2018) in his book gave the commentary on the Information Technology Act along with rules, regulations, policies, notifications etc. He also gave the section wise explanation with the latest case laws. This book serves the important reference source for not just professionals and lawyers but also for litigants and various other stakeholders.

Debarati Halder and K. Jaishankar (2017) in his book reveals the loopholes in the present laws and policies of the Indian judicial system and what can be done to ensure safety in cyberspace. The author addresses the various raging debates in the country such as how women can be protected from cybercrimes and what steps can be taken as prevention. This book provides the detailed answers to a wide array of questions that gave the scholars a way to find their answers.

III OBJECTIVE OF THE STUDY

The following are the main objectives of the study which are as follows: -

- To study the concept of internet in the virtual world.
- To discover the facts in history about the cyber world.
- To examine the computers based on their foundation.
- To find out how cyber crimes are affecting todays digitalisation.

IV RESEARCH METHODOLGY

Since it is doctrinal research, the study is based purely on theory work. The methodology is based on method of case study which are concerned with primary sources and secondary sources which includes the judgements passed by the Supreme Court and High Court and it also includes the help of other sources like Books, Articles, Indian and Foreign Journals, Literature Reviews, Newspapers, Debates, Commentaries and other many websites. Various Codified laws, News Weekly, International Conventions has been studied to analyse the information about this research. In short, it can be said that the work is based on theory research to analyse the study.

V INTERNET

Internet stands for International Network of computers. It is considered as huge bases and now becoming important parts of our lives. Digitisation is altering the world even in more radical way than we ever think. Jobs and the communication which were done mostly before face to face conversation and interaction for example banking, shopping or communication can now easily be done online manner. By having the Internet easily availability now easily share all over the data and the information in the global scenario in an instant and in a quicker manner. Today the buzzword is only INTERNET. The wide area of network of Internet is spreading all over with each passing day. To analyse how fast the help of the Internet is growing, just pick any newspapers and magazines and carefully observe the advertisements given in them. Every organized group of people making its identity on the Internet. The history of Internet starts between 1950s and 60s assisted with speedy growth of computers. In 1957, the USSR (Union of Soviet Socialist Republics) launched Sputnik, the earlier artificial satellite in response to this technological achievement, the department of United States of defense established Advance Research Project (ARPA). This agency facilitated the technical research. In 1969, The ARPA designed a network of four computers to exchange and share their data. The official nodes which was firstly introduced of the network were UCLA (University of California, Los Angeles); SRI (Stanford Research Institute), UCSB (University of California, Santa Barbara), and the Utah University. This network was called ARPANET (Advanced Research Project Agency Network). The main purpose was to give out the details and distribute it between geographically dispersed computers. Later, Department of Defense of United States gave permission to the Universities to link this network for distributing hardware and software resources. The Internet grew into leaps and bounds during the 1970s. In

1971, more nodes joined the network. These new nodes included Harvard and NASA. In 1974, data was transmitted more efficiently with the growth of TCP. This led the earlier definition of 'Internet' being connected as a network which are already set. In 1982, Internet technology protocols were used, popularly known as TCP/IP (Transmission Control Protocol) then later IP (Internet Protocol). Tim Berners-Lee developed WWW in 1991. Earlier, Internet was utilized by engineers, scientists, and computer experts for research purpose. Moderately, the network was made easily available to the agencies of private and to the public in general. People started using it for sending communication and folder in the middle computers. The organizational structure of Internet has steadily evolved, after around four decades of internet activity. Thus, making it a modern age marvel. In India, the services of Internet started in 1995 in the month of August dated 15th. through a company which was possessed by administration owned which is Videsh Sanchar Nigam Limited. Privatisation ISP like Airtel, Reliance, Sify, Tata etc. have been also allowed to provide Internet services to all.[2]

VI ARPANET

The historical events of the network began in the country named U.S. before 1960s. This was the Cold War period, when the world was bi-polar: USSR and the U.S. both were in competition to widen the impact of them in the world, seeing each other as an enemy and with great precautions or distrust. In the era of 1957, Soviet Union introduced their satellite named as Sputnik on 4th of October. The popularity of Sputnik compelled the America to launch something big to take revenge from Soviet Union. U.S. Défense gave answer by launching ARPA 2004 designed to promote research that the U.S. had competition with and conquer USSR regarding technological race. ARPA's main target was to create different ideas and inventions for research purposes, to give the proper definition to the technology that was reaching beyond the approaches which were developing at that time and to start the things which can be used for developing prototype systems. One of the ARPA offices was the Information Processing Technique Office which usually gives funds in computer science which are mainly designed to move American universities and research laboratories to construct a strategic communication network (Command and Control Research) that mainly have the capability to give the messaging availability to the government. A popular myth holds that the Department of Defence scientists thought that if the Soviet were capable to launch satellites, they might as well be capable to launch long-distance nuclear missiles. Because networks at that time, which was depend on a single, central control function so the misconception about that goes away and the main thing which was networks were vulnerable to attack. Once the networks were the control in the central point comes to an end to function, the whole network of that become of no use. The scientists want to spread the network to be sustained after aggression of many of its centres of communication. This thing was in their mind that there must be decentralization of repository for the secrets of defense during wartime. However, the colonizer Of the network of ARPA project made the argument that ARPANET was not relates to the building which had the resistant to the nuclear war: "This was never true argument of the ARPANET, it was just the inappropriate Research and Development Corporation study on protected voice for examining the nuclear war. After all the next work on the Internet did make importance of the survival which also includes the capability to handle the losses of portions which are large of the underlying networks. Leonard Kleinrock, the founder of Modern Data Networking, in the digital network communication who availed to build ARPANET, explicated that the reason ARPA wanted to deploy a network was to grant its researchers to contribute with each other the resources which are specialized in nature like hardware, software , applications and the services. It was not to secured in case of military attack and David D. Clark, Senior research scientist at MIT Laboratory for Computer Science who worked in the ARPANET project in the early 1970s, verbally expressed he never aurally perceived of nuclear survivability and there was no mentioning of this conception in the ARPA records from the 1960s In 1962, the director of the first Information Processing Technique Office was Licklider. His important work was to interlink the Department of Defence's main computer via world-wide dispersed network. Licklider segmented the observation of an Internet computers a worldwide interconnected agreed terms of processing nodes from where anyone can directly see their data and programs. In the year 1962 of August, Welden Clark and Licklider issued their first paper by giving elaboration of the Internet named as "On-Line Man Computer Communication." They saw that conveying the communication network as an instrument for the collaboration of scientific things. Paul Baran in the year 1964 of Research and Development Corporation especially need the mention because of his research projects which mainly created a myth that ARPANET connection was to the rise of a network which was decentralized can enable the U.S. a capability to do the second strike. In 1964, Baran has been given the commissioned post by the Air Force of United States to gain knowledge about how the military could maintain an authority over its missiles and bombers attack of nuclear. In the year 1964, Baran suggested a distributed plan for the U.S. telecommunications infrastructure having no central point and central command that could remain alive a first strike. In the occurrence of an attack which can be done at any point, all the points which were surviving points would be able to gain again the establishment to contact with each other. About six years after ARPA was established. The main architect which was Lawrence G. Roberts of ARPANET wrote that the Research and Development Corporation work had no valuable effect on ARPANET arrangements and the past events of Internet.[3] Electronic mail is yet another popular utilization of the Internet. It is that method through which it can be stored without any hesitation and can be easily accessible whenever user wants whether it is from recipient side or the sender side because all the control is with them only. Easily access remote method is yet another utilization of the Internet in which Internet gave permission to other computers to connect and store the information easily without knowing the current place user is residing. Sharing of file is also popular. It gave permission to the people to send files through E-mail, File Transmission Protocol, and peer to peer networks.[4]

VII COMPUTER

The name of word 'computer' is a word that has various meanings in the previous centuries. It was firstly coined from the word of Latin in somewhere mid-17th century and it simply described as someone who computes. The American Heritage Dictionary gave its first definition of computer as an individual who computes on a computer. In the middle of 20th century, computer is said to be associated with activities of human and it applied it as a device which is programmable and electronic in nature which can store the data and change and process data. In today's world, computer can easily be referred as the computing device whether they are electronic, programmable, or having the capacity of storing and retrieving the data. Computer is used as a machine which is general purpose in nature that proceeds the data and as stated by the rules which are given by the person who is using it store the data which could be one or the other internally or permanently. The equipment's which are attached to it are known as hardware and the instructions which are purely given by the utilizer and what user do on the computer is known as software. A full program is set by the human who gives the directions that gives orders to the computer to function in the specific manner. The computer history in the field and area of technological development is considered because it is conventionally the growth in the automation in computers that can brought social and economic advancement.[5] Today in the world of 21st century, the electronic computers and laptops are used by everyone, but it is not the case back in the early World War II where the most basic of computing are used for example people uses the devices such as abacus were used to represent the data and to perform the various calculations. It was in golden age and 17th century when European mathematicians invented calculator that used the mechanism of clockwork and cranks. As our forbear of present electromechanical machines, these devices can't be considered as the computers today because of the fact that a calculating machine which all knows is calculator is like an apparatus that can do the functions arithmetically with numbers which includes adding, subtracting, multiply and division. Computers of our generation have the technological edge of electronics in which computers are automatic and can perform variety of functions without the need of human intervention. People need such technology which can overcome the problems of abacus etc. Charles Babbage got an idea to design and invent the modern personal computer on XIX century which got its recognition in the global scenario. It used the mechanism of clockwork, but he could not create the various gears for the computer to work and technology of his day still needs various improvements to work. So, the technology which enables todays computer industry is defined as electronics. Thomas Edison in 1880s created the vacuum tubes which can be helpful for the amplifications which is the reason the working of TVs and radios are there in early times or to switch their roles in computers. Infact vacuum tubes are those sources which give power to all the electronic devices until the solid-state devices are created which is named as semiconductor. However, with foundation of the vacuum tubes the technology is ultimately existed to generate the first modern computer. After that ENIAC was created which was the initial computer which is digital as well as programmable rather than the electronic calculator because it was 1000 times speedy than any existing calculator. It mainly gives help to solve the challenging math problems which require more hour and energy at that time. With numerous advancements in the zone of making technology better, there comes an era of computers family tree in which there began a series of generation of computers from the 1st generation of computer till the 5th generation of computers. The personal computers which we used today in many respects a straight successor of ENIAC inspired research which includes the stored program concept. Today computer achieved a gradual evolutionary process in which both the work of hardware and software technology has been made imaginable with the recent developments. The founder of the computer which was Charles Babbage discovered the computer which can do assignments of mechanical handle. However, the idea of inventing the computer immediately in a physical form took nearly a century with highly accurate device. George Stibitz of Bell Labs was the first person who was successful in making an effort by using the teletype tape which have the capacity to store the information that could read at roughly the 'digits' per second. The main attribute of this tape tester was that it can use the binary code instead of decimal system which is still in use in other machines and used for electronic storage. Each and every device was produced and invented with the modifications in this era of late 1930s to the mid-1940s, there is some improvement again and again with the devices which were new and the main difference with the previous devices is that they are mainly used for the calculations of numbers which are complex and the improvised version of the models produced after that are mainly introduced for logic units using the operators IF ,OR , AND and THEN.[6]

VIII CONCLUSION

Community in Internet is predicated on the interaction between individuals. Internet has a vital social facet thereto that must not be unnoticed. Internet are often treated as a channel touching portion of real house at key points. Concepts area unit more responsible to the channel, and business is transacted through this channel. The Internet community's area unit members of the world community interacting on a special plane than in real house. With the massive growth within the range of net users everywhere the globe, the protection of information and its correct management plays a significant role for future prosperity and potentiality. It involves with individuals attempting to access remote service is that they are not licensed to use. Rules for compulsory wearing of helmet for bikers by government authorities, has no benefit for them, it is for our own safety and life. Same we should understand our responsibilities for our own cyber space and should at least take care of safety for our personal devices. These steps include installation of antivirus software and keeping it updated, installing personal firewalls, and keeping rules updated. We should monitor and archive all security logs. We should have backup of vital information. Our devices ought to be protected by passwords and there ought to be restricted access to sensitive information on our devices. And specifically, we should always aim for additional laptop accomplishment to grasp the security problems associated with our cyber house. At constant time we would like to utilize the specialization of personal sector within the field of cyber security and government ought to promote additional surgical process comes for the national cyber house.[7]

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