

# Analytical Approach of Cybercrime and Indian Cyber Security

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## ABSTRACT:

*Cybercrime is a criminal activity done using computers and the Internet through transferring, accessing, retrieval and utilising the data and information. This includes anything from downloading illegal music files to stealing millions of dollars from online bank accounts. Cyber crime also includes non-monetary offenses, such as creating and distributing viruses on other computers or posting confidential business information on the Internet. Perhaps the most prominent form of cyber crime is identity theft, in which criminals use the Internet to steal personal information from other users. Two of the most common ways this is done is through phishing and pharming. Both of these methods lure users to fake websites (that appear to be legitimate), where they are asked to enter personal information. This includes login information, such as usernames and passwords, phone numbers, addresses, credit card numbers, bank account numbers, and other information criminals can use to "steal" another person's identity. For this reason, it is smart to always check the URL or Web address of a site to make sure it is legitimate before entering your personal information. Present paper reflects and analyse the deep rooted concept of the cyber crime and also to security of the crime in Indian context.*

## Key Words:

Phishing, Farming, Viruses, Login, URL, NSCS (National Security Council Secretariat, Cyber Security Expert, risk management

## ORGANISATION OF PAPER:

Starting from the Introduction, Topic 2 is literature Review and study. Topic 3 is all about Indian cyber security, Topic 4 is Future of cyber Security of India Topic 5 Importance of cyber security. Topic 6.0 tells about the conclusions. followed by the about the authors and references.

## 1.0 INTRODUCTION:

India is a developing country. Revolution came in the economy and employment due to adaptation of

Information Communication Technology. We in India are the largest user in the world of Information Technology. We are becoming the powerful nation in the field of our security. We, in India have the second largest army in the world. We are focussing on our Nuclear resources and powers on one hand and on the other hand our Security, But it is not enough to achieve the excel. India is not even cyber security. Indian cyber security is falling behind in this internet era. Our Army is known for the bravery and the dedication for the nation. Is that sufficient for the full protection of the Nation Army may protect us from external threats, Physical attacks and helps us in conflicts inside or outside the nation. May you imagine about the security of the documents, the real security of the nation.

Beside the topic for the National importance, Govt. of India is not focussing the much attention on the issue, furtherance USA, having a very good security system, but they still consider importance of cyber security matter.

## 2.0 LITERATURE REVIEW AND STUDY:

Indian cyber security is not robust as country like that of USA or Japan. China has about 1.25 lacks of experts, followed by USA about 91 thousands, Russia has about 7.5 thousands, in India we have a bunch of 556 people. Indian Cyber Security is under NSCS (National Security Council Secretariat) . It handles the whole structure and architecture of Indian cyber security. One of its concern about the Indian cyber Security has been narrates –“The existing combined strength of cyber security experts in all organisation in the Indian domain is 556 which is grossly inadequate to handle Indian cyber security activities in a meaningful and effective Manner.

### 2.1 Threats in cyber world:

Cyber security is very essential for developing and developed nation. This is not only because we all are using the computer all around, but also how to handle our data and information secured from any type of the attack. Information may be confidential as the essentiality of the data. Every nation in this era is trying to make itself better than the others in Data Security. It is pity that even terrorists and unethical organisation try to get the

confidential data and sell to the other country. or even they try to leak the nation's security data. Sometimes they may disturb the whole system. In other words all these things are known as Hacking in general Language. Hacking is a criminal activity; even many people and organisations are involved in it. This activity enables them to peek into others confidential matter, or to innovate them better than others.

### **2.2 What cyber Security Does:**

Cyber Security handles all those threats which may cause of harm of National Security and Data. Security is a watch dog on the inside and outside of the Nation. They handle every transaction, every data interchange, every single information on internet from one country to other or vice versa. In case they found anything harmful or not usual they start tracking it. They check the content and every step of action. And then they take required action. They then trace the I.P. of the process and then they perform respective action.

### **3.0 INDIAN CYBER SECURITY:**

Keeping in view, the development of country and its fast pace, India is also collaborating with other nation operation and technologies. At this time many information and confidential data are sent on internet from nation to nation or to intelligence centres. But this data may be tried by other people or organisation to be accessed and then misused. But do you trust that the 556 people is enough to handle every action on internet. As many things are there on internet to handle. Like data interchange, file exchange, money transactions, even the chatting and Emails. It is a serious question, how can this small team will handle all these? As there are no limited actions to observe, there are infinite actions to be observed. Because cybercrime covers such a broad scope of criminal activity, the examples above are only a few of the thousands of crimes that are considered cybercrimes. While computers and the Internet have made our lives easier in many ways, it is unfortunate that people also use these technologies to take advantage of others. Therefore, it is smart to protect yourself by using antivirus and spyware blocking software and being careful where you are person.

### **4.0 FUTURE OF CYBER SECURITY IN INDIA:**

A brief introduction and concept of cyber security is a new to the field to all. It is also the essence of the hour and Security for cyber crime which deals with Network outages, data compromised by hackers, computer viruses and other incidents affect our lives in ways that range from inconvenient to life-threatening. As the number of mobile users, digital applications and data networks increase, so do the opportunities for exploitation. As because of all

these things on internet and security. Keeping in view the reporting of new cases of hacking and spam are reporting day by day, so as to handle effectively the Indian cyber security department need much more people. NSCN is trying to make a new team and new organisation for security. Cyber security, also referred to as information technology security, focuses on protecting computers, networks, programs and data from unintended or unauthorized access, change or destruction. According to planning and estimation till 2015 Indian cyber security need around 5 lacks jobs. Hence there is a scope in future and present for all those ,who have cyber security background professional. Indian cyber security is going to take anyone who has any knowledge of computer related operations. And we may train them according to needs.

It is worth to note and mention that department of Information Technology is across the sector for generating demands for a new kind of specialist. The Cyber Security Expert .National cyber security policy find that India needs as much as of 5,00,000 professional in the field by 5years. At present Information Technology is the lifeline and backbone of Banking and telecom and other sectors are also becoming dependent on them. Keeping in view the need we also inviting the more threats of cyber attack. Hence we need more technical trained manpower in the field of cyber security.

### **5.0 IMPORTANCE OF CYBER SECURITY:**

Governments, military, corporations, financial institutions, hospitals and other businesses collect, process and store a great deal of confidential information on computers and transmit that data across networks to other computers. With the growing volume and sophistication of cyber attacks, ongoing attention is required to protect sensitive business and personal information, as well as safeguard national security.

During a Senate hearing in March 2013, the nation's top intelligence officials warned that cyber attacks and digital spying are the top threat to the national security, eclipsing terrorism.

### **6.0 ANALYTICAL CONCLUSIONS:**

Above analytical approach leads on the followings conclusions as Cloud, Mobile, Social media. It seems every year the technology landscape makes a tectonic shift. And with each new technology comes new IT security concerns. The rise in sophisticated attacks, combined with a worldwide shortage of IT security skills, makes partnering with a trusted IT security services provider critical. Even at IBM, following IT security services cover every corner of your network, from infrastructure to applications to devices. We protect some of the most sophisticated networks in the world, and

employ some of the best minds in the business. And we help you to reduce the cost and complexity of your IT security needs. What have been offered are listed as.

#### **6.1 Application security services**

Application security services effectively assess, manage, and secure your organization's web usage and business-critical applications. There are various application security services available.

#### **6.2 Data security services**

Data security Services enables and ensure to protect your sensitive data, increase compliance, and mitigate risk.

#### **6.3 Emergency response services**

Emergency response services enable for Leverage experienced and certified consultants to help manage and respond to security incidents. Such services are boon in the disaster time.

#### **6.4 Identity and access management**

The main characteristics of a good information system are to provide the right information to the right person at the right time frame. We have to ensure the right people have accessed to the right information

#### **6.5 IT risk management**

IT risk management enables to Identify areas of potential risk and design a customized, complete security solution. IT risk management is basically rather more difficult and complicated to handle .

#### **6.6 IT security consulting**

IT's security consulting is one of the important factor to build effective IT security policies to reduce threats to your critical business assets

#### **6.7 IT security governance and compliance services**

Its security governance and compliance services may be more effective for the better manage risk, compliance, and governance and to safeguard the interest of the country and also the countrymen .It also include and protect the existence of our society.

#### **6.8 Managed security services**

Managed security services enable us for Secure your information security assets and lower your costs and to save our existing security services.

#### **6.9 Mobile security services**

Mobile security services means to protect mobile devices, secure connectivity, ensure appropriate access, and safeguard data and applications

#### **6.10 Network security services**

Network Security services deals with to enable flexible, intelligent IT and network security solutions to combat Internet threats.

#### **6.11 PCI security**

PCI Security enables and Streamline security vulnerability management and manage compliance with cloud-based computing

#### **6.12 Penetration testing**

Penetration testing ensure the Securing online assets and supporting regulatory compliance by exposing the vulnerabilities on the network. This enables the security of penetrates and also the testing for the same.

#### **6.13 Physical security services**

Physical security services enables and also enhance your physical security plan with digital video surveillance and video analytics.

### **7.0 ABOUT THE AUTHORS**

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