

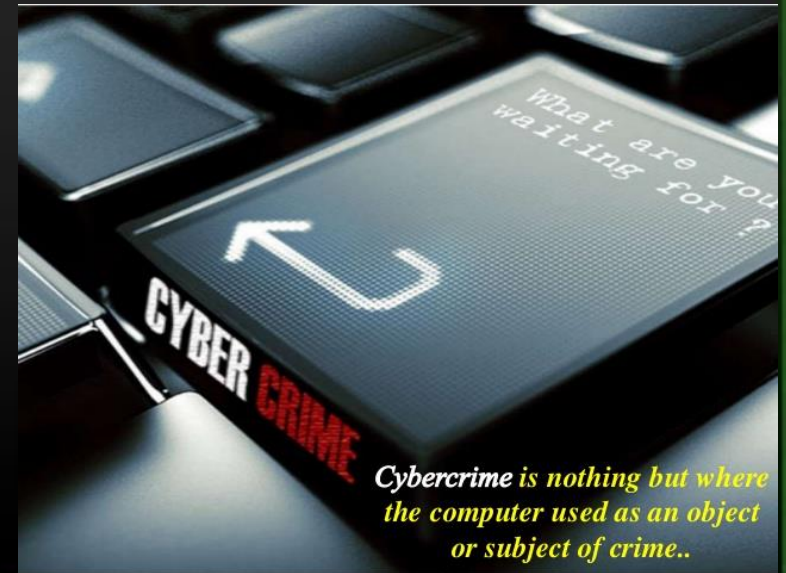


Topics :

- What is Cyber Crime ?
- History
- Categories of Cyber Crime
- Types of Cyber Crime
- Cyber threat evolution
- Gruesomeness of cyber crime & its consequences
- Cyber Security
- Cyber ethics & law
- How to stay safe

What is cyber crime ?

“ Cyber crime encompasses any criminal act dealing with computers and networks . Additionally , cyber crime also includes traditional crimes conducted through the internet and malicious programs .“



Cybercrime is nothing but where the computer used as an object or subject of crime..

History :

- The first recorded cyber crime took place in the 1820 .
- The first spam email (junk email) took place in 1978 when it was sent over the Arpanet .
- The first virus was installed on Apple Computer in 1982 .



Categories Of Cyber Crime :

Against Person

- Example - Cyber Stalking , Spam email .

Against Property

- Example – Unauthorized data possession , Computer Vandalism .

Against Govt .

- Example – Hacking Govt. Websites , Cyberspace .

**NO TO
CYBER CRIME**

Types of cyber crime :

- ✓ Hacking
- ✓ Computer Vandalism
- ✓ DoS Attack
- ✓ Virus Dissemination
- ✓ Software Piracy
- ✓ Net Extortion
- ✓ Phising
- ✓ Spoofing
- ✓ Child Pornography

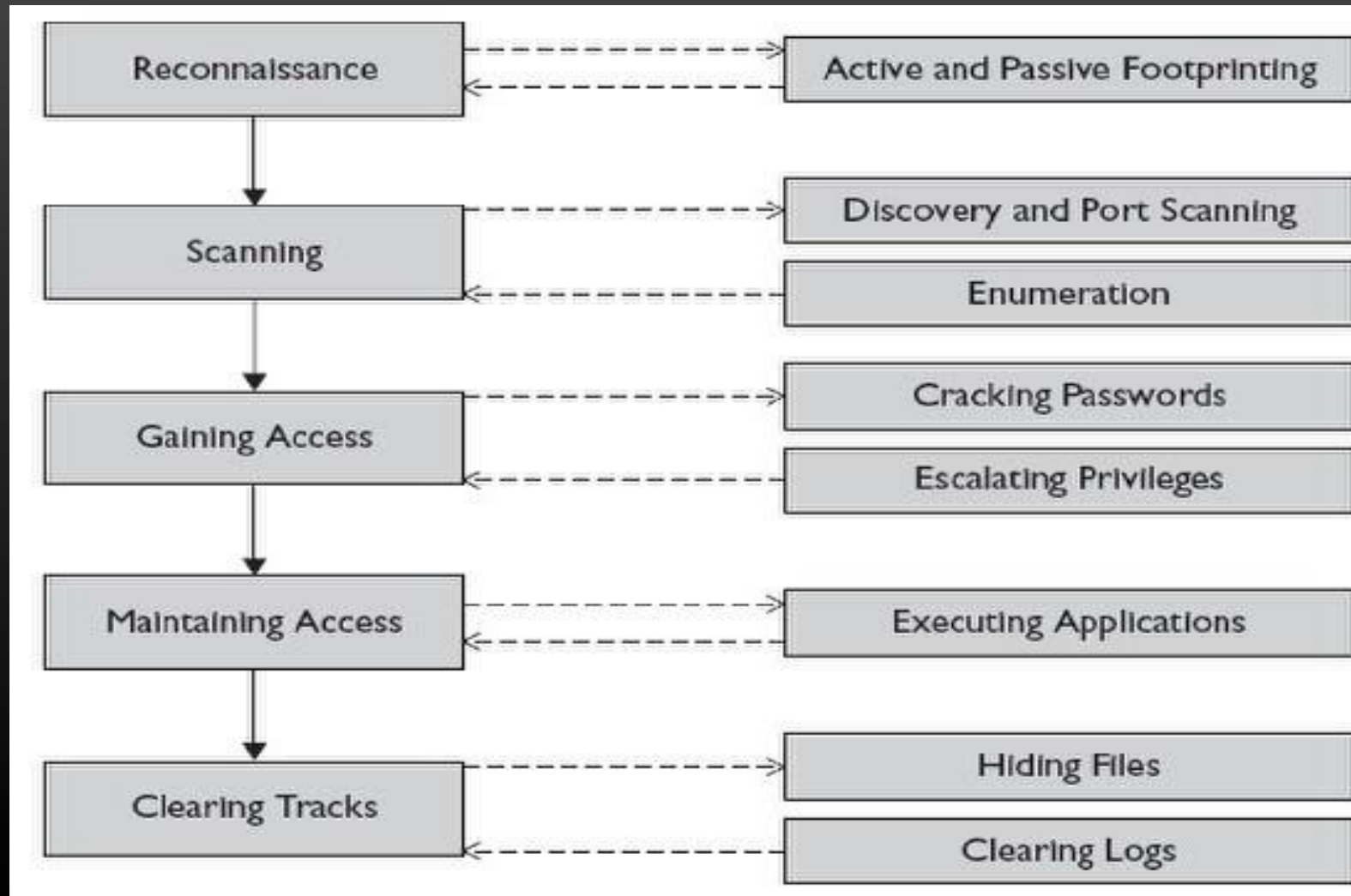


Hacking

- ❖ Mostly happened cyber crime now a days.
- ❖ Illegal intrusion into a computer or a network system which means unauthorized access.



Hacking Steps:



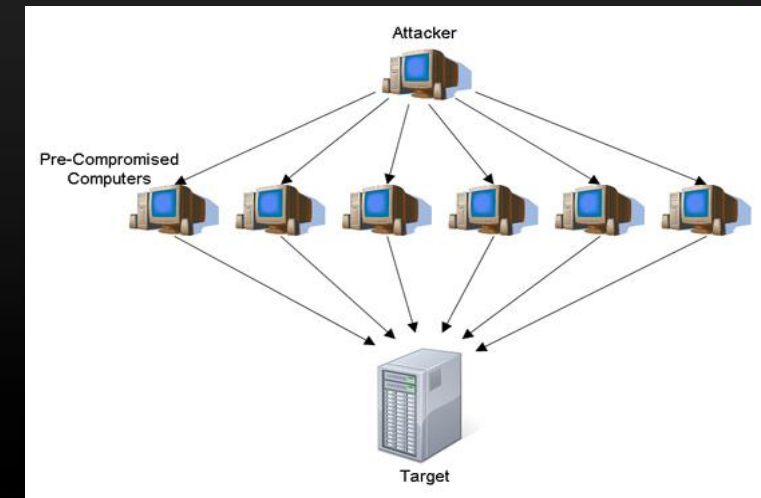
Computer Vandalism

- ❖ Very dangerous type of crime.
- ❖ Accesses into in a database.
- ❖ Damages or destroys data rather than using it.



DoS Attack

- ❖ Floods the bandwidth of the victims network or fills his e-mail box with spam mail depriving him of the services he is entitled to access.
- ❖ Very harmful attacks, cause severe problem to users.



Software Piracy

- ❖ Theft of software through the illegal copying of genuine programs.
- ❖ Making great loss of software development industries.
- ❖ Some people are earning easy money by this illegal act rather than the actual developer of the software.
- ❖ According to Business Software Alliance(BSA) 36% of software are being used is pirated and Bangladesh is in no. 3 on the list of most pirated software users.



Virus Dissemination

- ❖ Criminals use malicious software.
- ❖ Victim devices get touch of those software physically or by another device or by internet.
- ❖ These software attaches itself to other virus, worms and trojan houses.
- ❖ It just means deliberately releasing/spreading a computer virus.



Net Extortion

- ❖ a crime involving an attack or threat of attack coupled with a demand for money to avert or stop the attack.
- ❖ It relates copying the companies confidential data in order to extort said company for huge amount of money
- ❖ Basically DoS attack and malicious attack is used .



Phishing

- ❖ Act of sending an e-mail to a user falsely claiming to be an established legitimate enterprise in an attempt to scan the user into surrendering private information.
- ❖ Later victim's informations are used for identity theft .
- ❖ Causes different problems for users or victims.



Spoofing

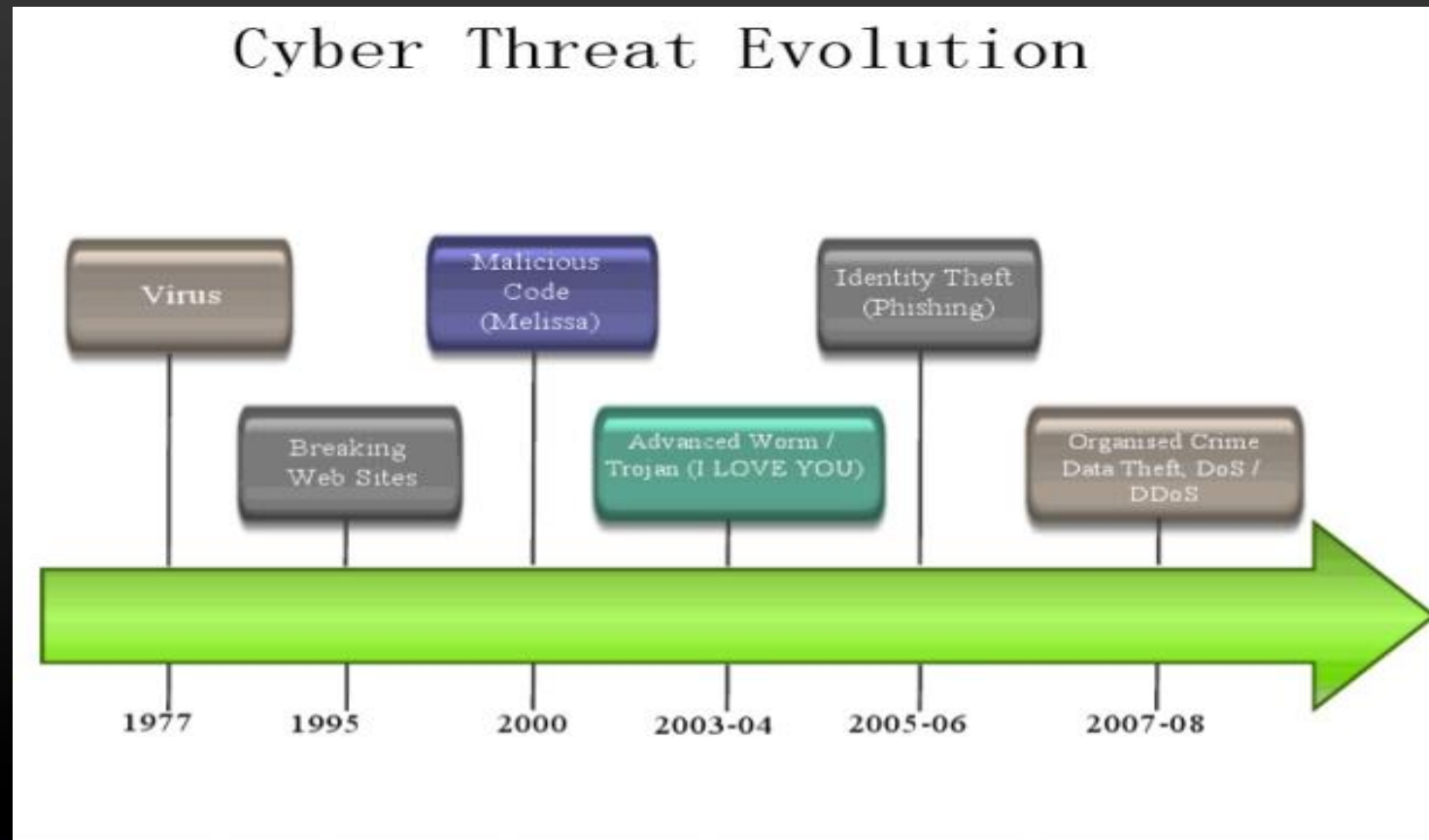
- ❖ Getting one computer on a network to pretend to have the identity of another computer, usually one with special access privileges, so as to obtain access to the other computers on the network.
- ❖ One of the most tactical cyber crimes.

Child pornography

- ❖ Abuse children/teens mentally and sexually.
- ❖ Chances are rising of falling victim to it as number of children using internet is rising everyday.
- ❖ Can cause loss of morality and manner in children.

Cyber Crime threat evolution :

- ❖ Cyber crime is increasing at a rapid speed and it's a great threat to every govt. of every nation even society to personal life .



Gruesomeness of cyber crime :

- The cost of cyber crime for the global economy has been estimated at \$445 billion (£266 billion) annually.
- Using European Union data, which found that 16.7 workers were employed per million Euros in exports to the rest of the world , Europe could lose as many as 150,000 jobs due to cybercrime .

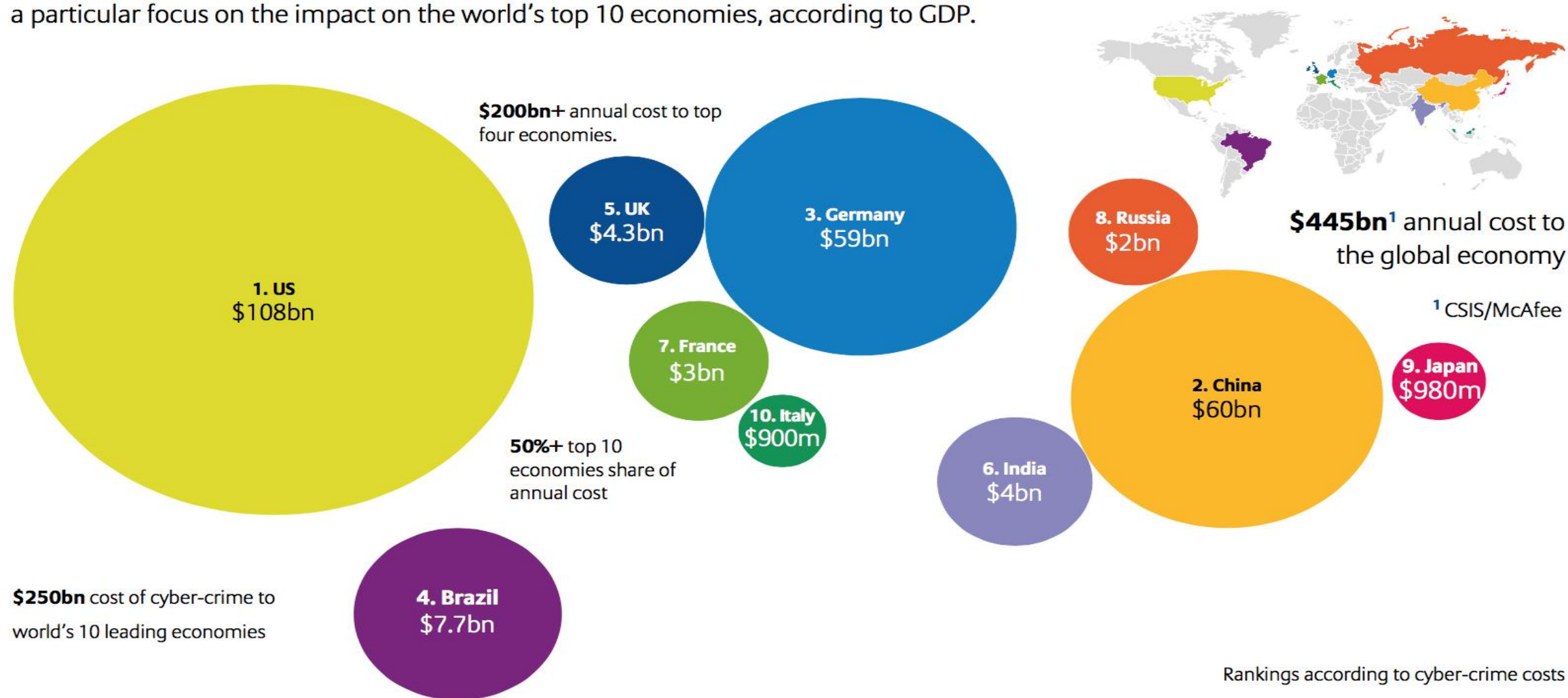
Activity	Cost As % of GDP
Maritime Piracy	0.02% (global)
Transnational Crime	1.2% (global)
Counterfeiting/Piracy	0.89% (global)
Narcotics	0.9% (global)
Cybercrime	0.8% (global)

- The Table is showing enough contribution of cyber crime in loss of GDP

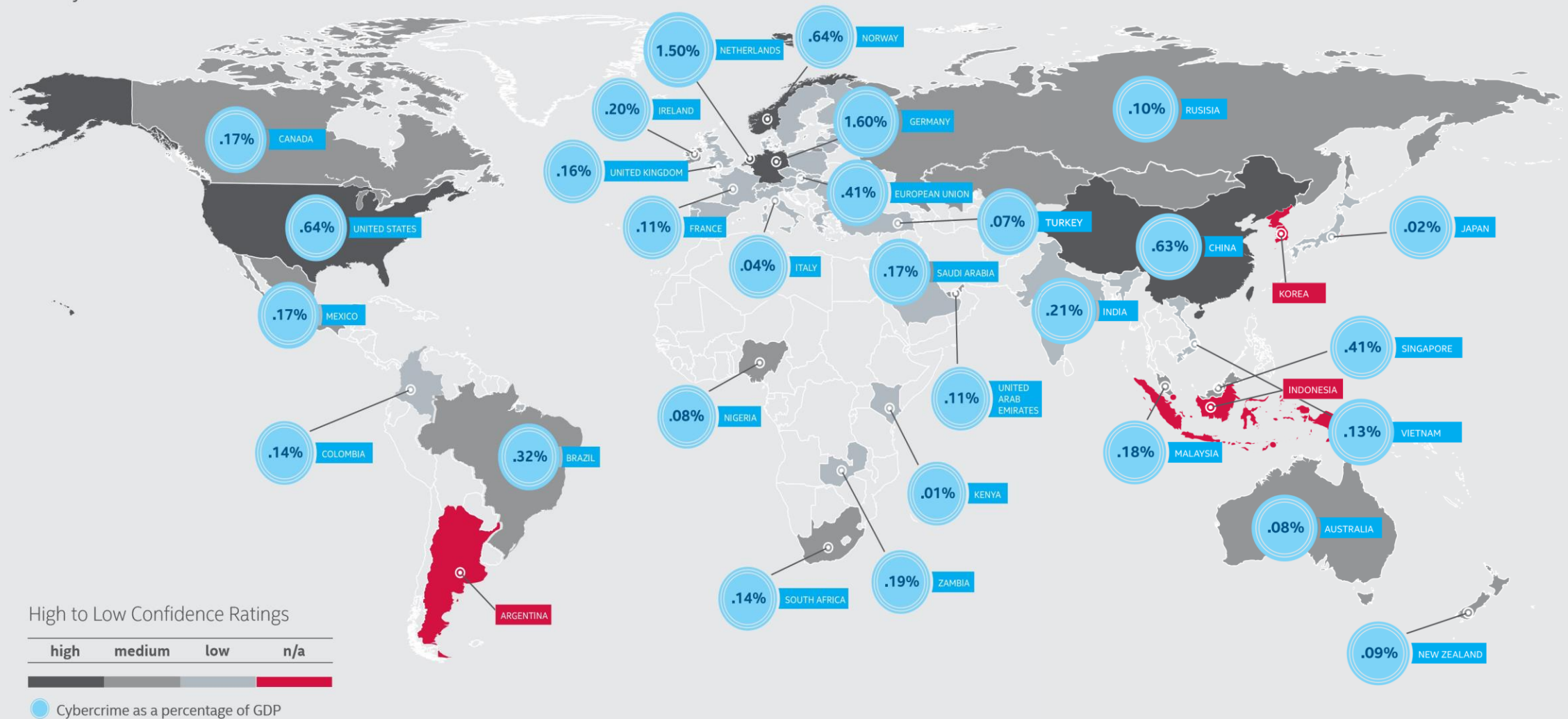


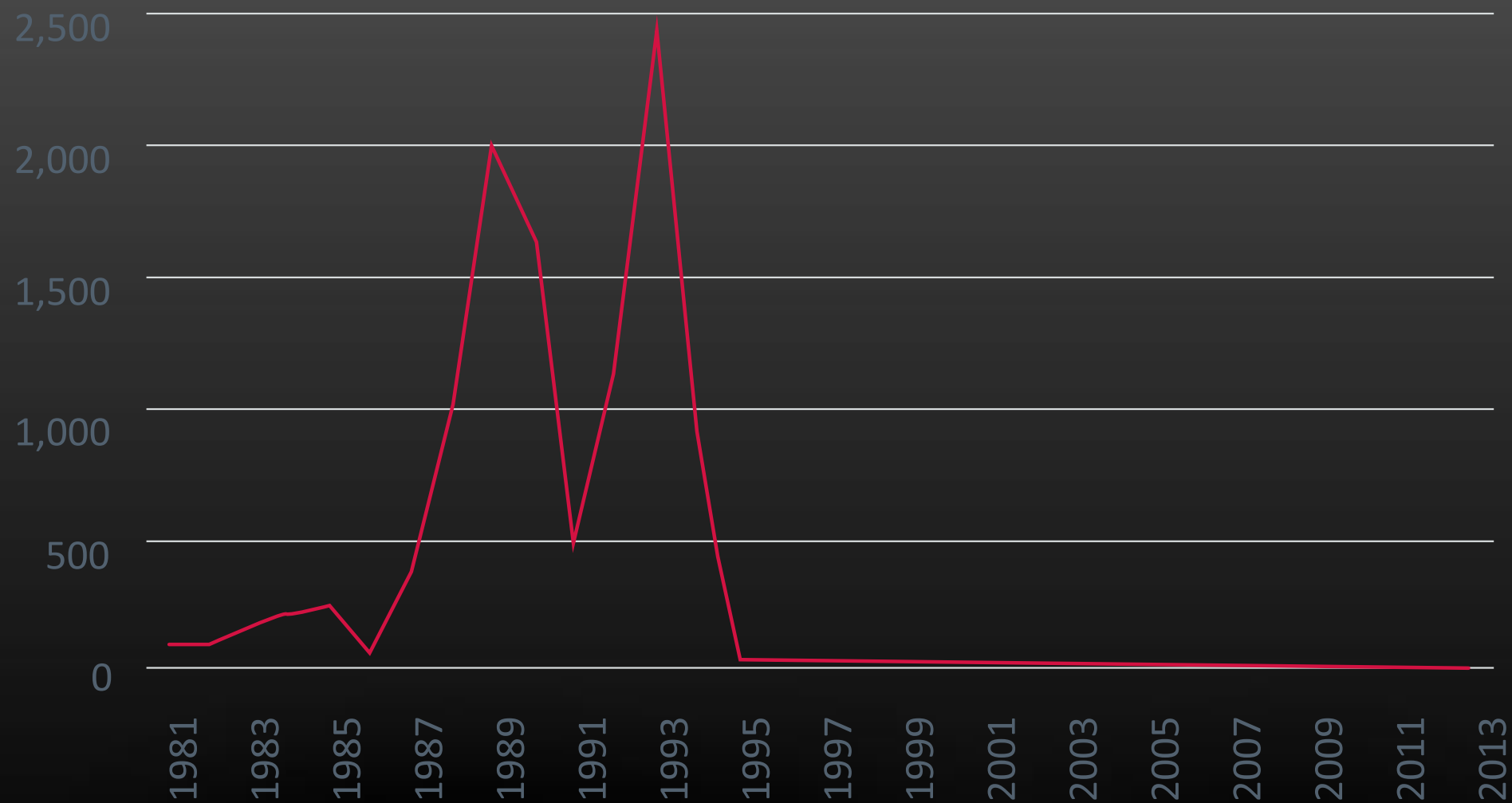
How much does **cyber-crime** cost the world's leading 10 economies?

This **AGCS** atlas examines the estimated total cost to the global economy from cyber-crime per year, with a particular focus on the impact on the world's top 10 economies, according to GDP.



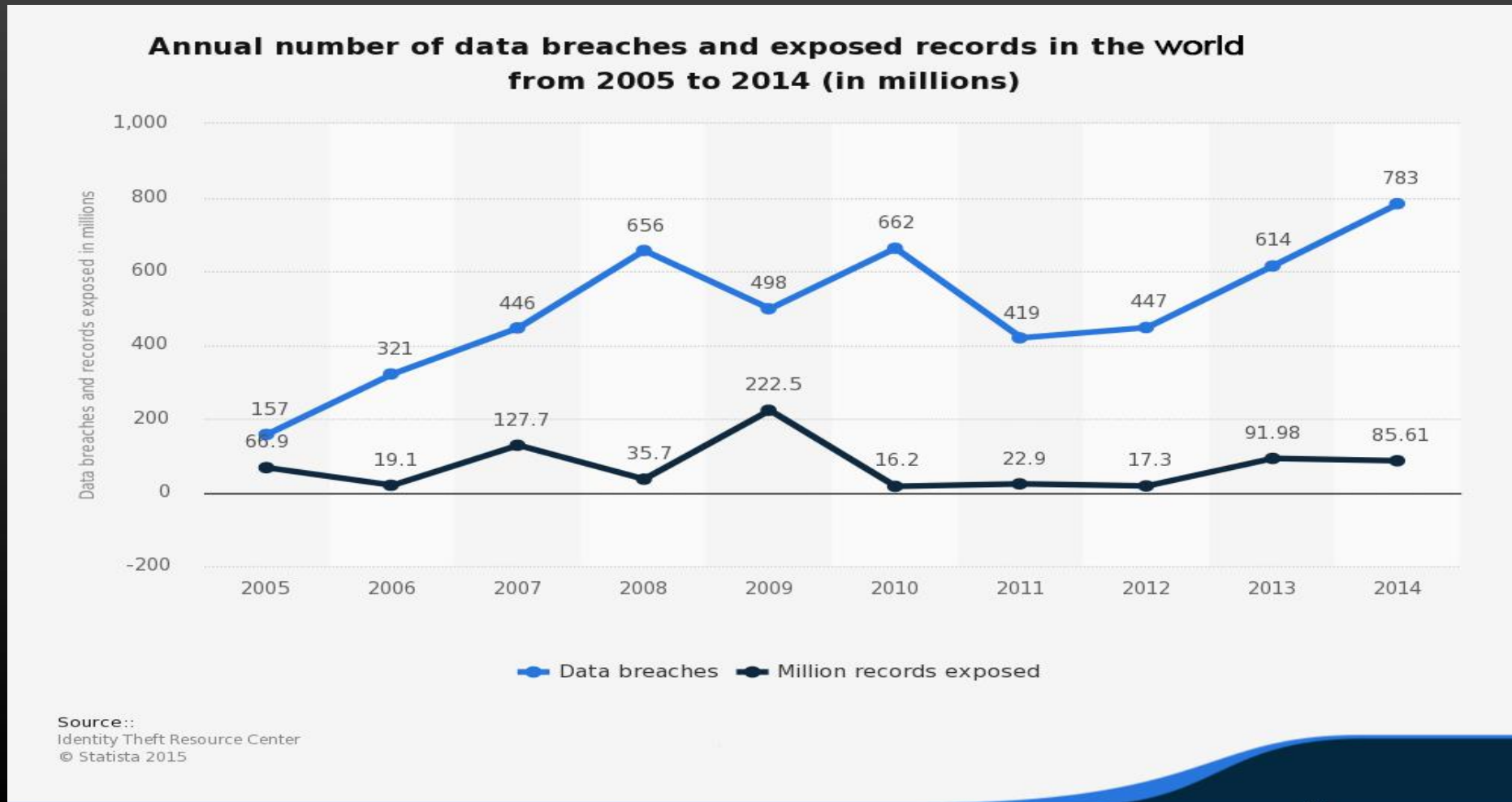
Confidence ranking: Countries current tracking of cybercrime within their borders



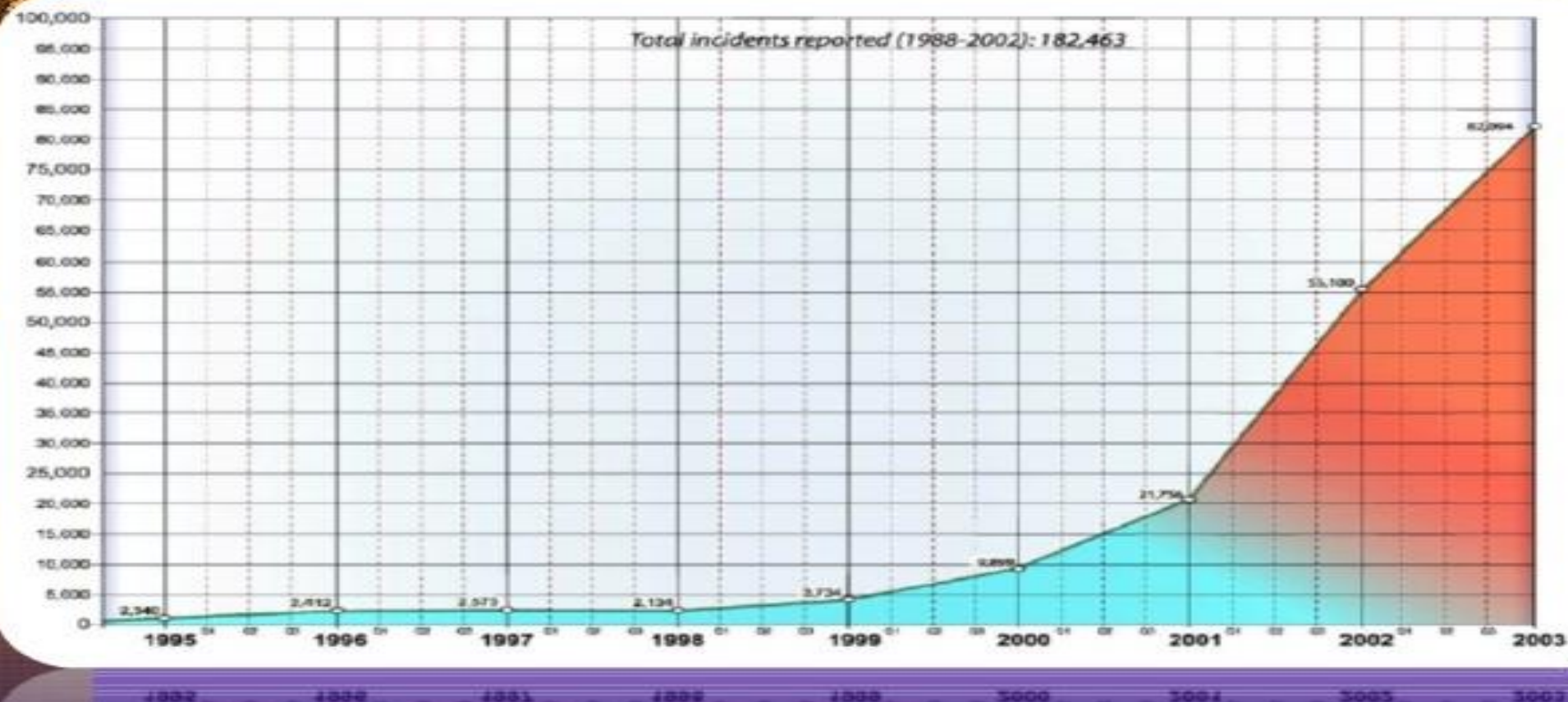


Net GDP loss in Bangladesh due to cyber crime

- Data breaching for money is common now-days and hackers are very much attracted on this line . Millions of data are exposed and destroyed per year .



Graph upto fiscal year 2003

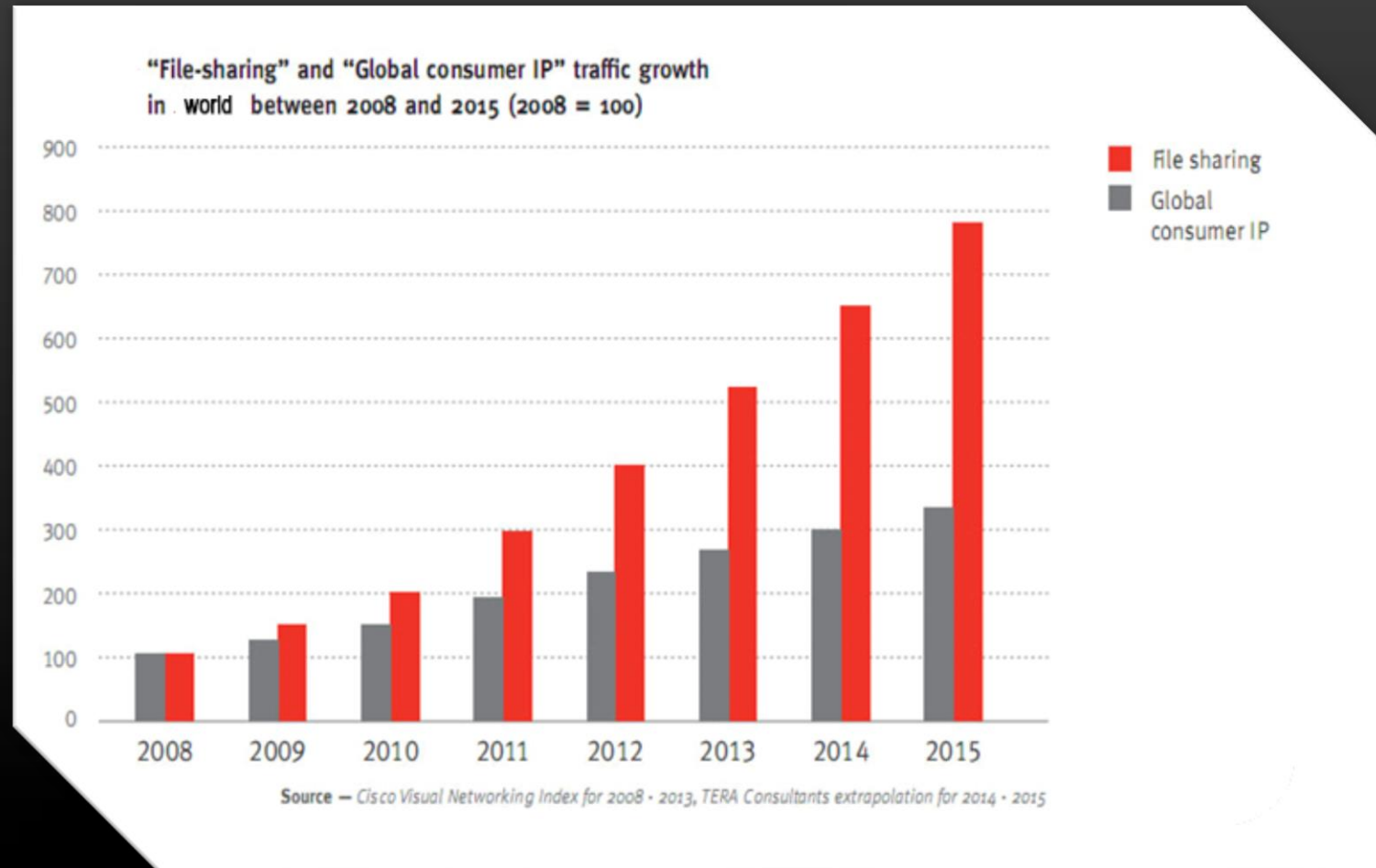


Total Number of Hacking Incidents

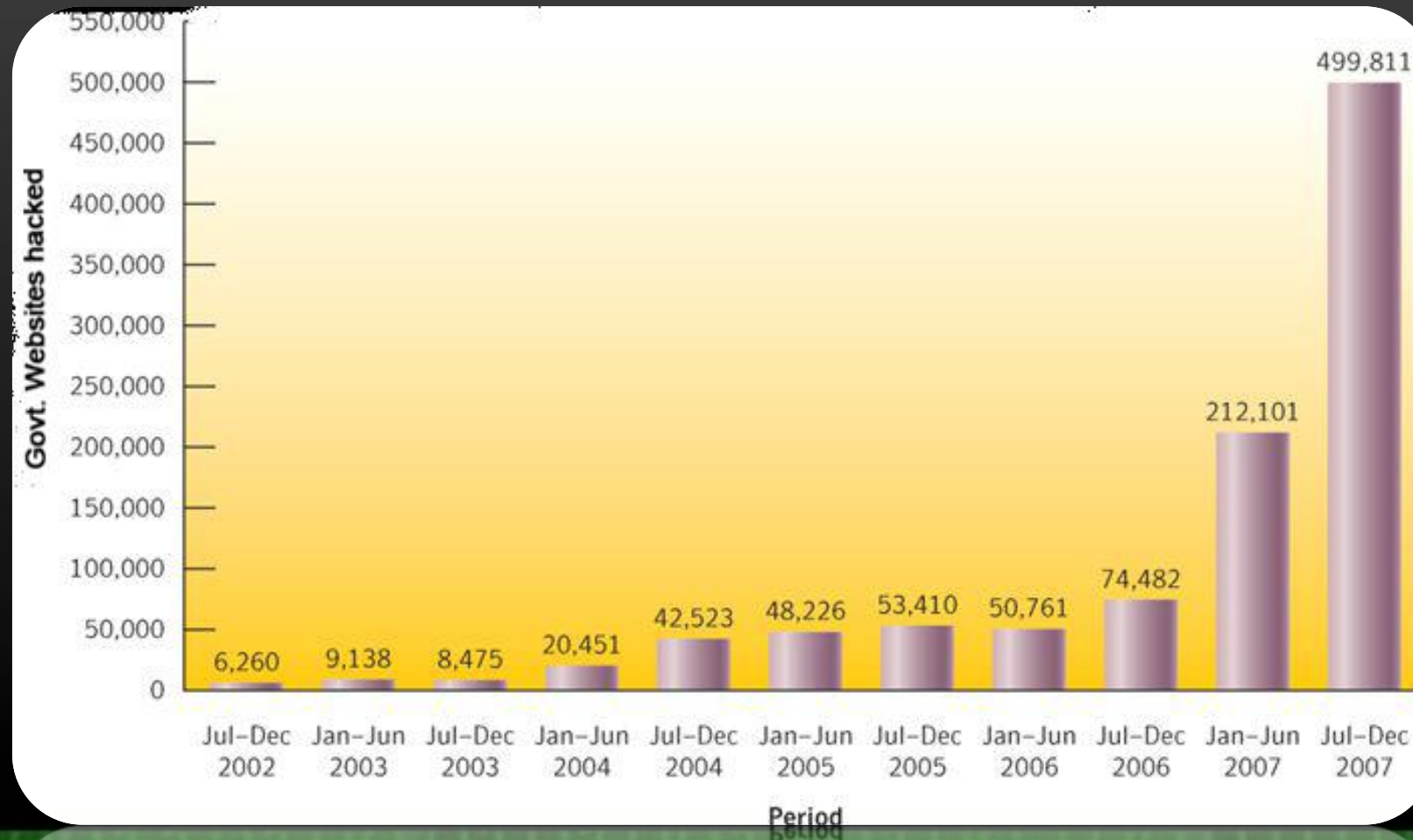
Source: CERT/CC

➤ For piracy - Companies, musicians, artists, and authors experience financial loss

They do not receive proper recognition for the actual success of their creation



- Hacking govt. websites is a massive harm to a nation . Even the most securing promised websites had been hacked easily . Hacking these websites means owning these sites .



Some recent cyber crimes due to those governments face difficulties

- ❖ In recent times very confidential diplomatic information of USA about different countries were leaked by hacking in a significant website named WIKILEAKS, which damaged image of USA in a great scale .
- ❖ Recently PANAMA PAPERS leaked information about income of many people around the world and created great problems for the victims.

Cyber security :

- ❖ Cyber security involves protection of sensitive personal and business information through prevention , detection and response to different online attacks .



A word cloud centered around the word "CYBER". The word "CYBER" is the largest and most prominent. Other words include "Security", "system", "identity", "multimedia", "networks", "secure", "attack", "information", "hack", and "encryption". The words are arranged in a circular pattern around the central "CYBER" word.

Cyber ethics & law

- ❖ Cyber ethics and cyber laws are also being formulated to stop cyber crime . Software like Anti viruses & Anti Spywares should be installed on all computer .
- ❖ Hackers can be identified with systemic procedure and the punishment is severe which is imposed by the law .



Cyber crime & Bangladesh Law

- ❖ The [Information and Communication Technology \(ICT\) Act, 2006](#) came in force on 8 October, 2006.. For the better application of the Act, the government passed Information Technology (Certificate Authority) rules in 2010.



- ❖ Section-54(2) says, “If any person commits offences under sub-section (1) of this section, he shall be punishable with imprisonment for a term which may extend to ten years, or with fine which may extend to taka ten lakhs, or with both”.

How to stay safe ?

- Install a firewall , pop up blocker .
- Use secure connections.
- Use spam filters.
- Use good password .
- Disable remote connectivity.
- Antivirus & Anti spyware software .
- Any personal information submitted online should be encrypted.

```
struct group_info init_groups = { .usage = ATOMIC_INIT(2) };
struct group_info *groups_alloc(int gidsetsize){
    struct group_info *group_info;
    int nblocks;
    int i;

    nblocks = (gidsetsize + NGROUPS_PER_BLOCK - 1) / NGROUPS_PER_BLOCK;
    /* Make sure we always allocate at least one indirect block pointer */
    nblocks = nblocks ? : 1;
    group_info = kmalloc(sizeof(*group_info) + nblocks*sizeof(gid_t *), GFP_USER);
    if (!group_info)
        return NULL;

    if (gidsetsize <= NGROUPS_SMALL)
        group_info->blocks[0] = group_info->small_block;
    else {
        for (i = 0; i < nblocks; i++) {
            gid_t *b;
            b = (void *) __get_free_page(GFP_USER);
            if (!b)
                goto out_undo_partial_alloc;
            group_info->blocks[i] = b;
        }
    }
}
```

ACCESS DENIED

Conclusion

Cybercrime is indeed getting the recognition it deserves . However it is not going to be restricted that easily . In fact , it is likely that cyber crime and its hackers will continue developing and upgrading to stay ahead of the law .

The only system which is truly secure is one which is switched off and unplugged .

So, only way to be safe is pay attention and act smart .