

How Much Aware People of Bangladesh Are of Cyber Crime

Noushin Ulfat Shukannya

Institute of Information Technology

Jahangirnagar University

Dhaka, Bangladesh

Mohammad Rafiqul Islam

Department of Chemistry

Jahangirnagar University

Dhaka, Bangladesh

Fouzia Afrin Jui

Department of CSE

Jahangirnagar University

Gazipur, Bangladesh

Email: shukannya.2711@gmail.com

Email: md.rafiq78612@gmail.com

Email: fouziaafrin599@gmail.com

Abstract— Soil, air, water everywhere we use information technologies in daily life. Development of country, health, education and even country soil security is dependent upon modern technologies. We use them so inextricably that it seems there are no alternative ways of replacing technological life and it is quite true. Undoubtedly it is necessary to use data, no one can deny but the hard truth is, this is the thing that threatens safety. All that exists have a certain bundle of data and those data give us certain information. Thus we can know and learn about our surroundings. And when we know something then it's safety is compromised. Either we can be the savior or harmful for that thing. As a raising and developing country, people of Bangladesh are being digitalized themselves in the race of modern civilizations around the world. The use of modern technologies is gradually increasing. Each day they wake up more digitalized than the previous day. Country people are growing knowledge regarding digital technologies. Not all people can cope with regular devices that humans usually use. Although massive and most valuable parts of people are using technologies at the office, home, outside home, and everywhere. Living in the 21st century is very blissful for the facilities of modern technologies, accessibility, usability, virtual reality, and many more. Also, there are lots of bad deeds that have been done by evil people with agenda, we call them hackers. Here we come to the point of awareness of people when using modern technologies. Every step that we take on the internet, we must be sensible. Otherwise, anything can happen depending on our lost data. The final fact is our safety is dependent upon using and roaming the internet prudently, resulting in how much safer we are from cyber threats and unexpected events to occur. Protecting personal data is blindly necessary to avoid undergoing horrible damage.

Keywords— Cyber, Awareness, Cybercrime, Security, Technologies, Threats, Hackers, Internet, Data, Protection;

1.Introduction

The term cyber itself is a thrilling part of our life nowadays. But here the question arises, how much aware we actually are in the way of using it? Do we know that it can be devastating even due to a bit lack of consciousness?

Life is easier when we use digital facilities but how many people among us really think about how digital devices work behind the eyesight?

Well, it all starts with the word- data. Analysis of data made today's technological empowerment possible. Where there we touch, we are touching data, and those data form information regarding the touching thing. We collect, sort, and use those data to form a meaning. So what's wrong with that? And this question got compromised. It should be what's not wrong with that. Yes, we may use them often for mankind but the information is also the fuel of hacking. If we do not secure our data properly, we are vulnerable. Our safety will be compromised. The last update from BTRC (Bangladesh Telecommunication Regulatory Commission), 91.421 is the total number of internet subscribers at the end of January 2019 [1]. As Internet users are rapidly increasing, data loss threats are also increasing. A vast amount of people all around the world including Bangladesh don't even know about risks when they use the Internet for their daily works let alone about cybercrimes. Most of the people learn about risks after one or more cyber-attacks. Although there are many organizations working on cybercrime awareness to make people aware before any unexpected cyber event and also they help people who have already fall victim. As internet users are rapidly increasing is a large number, computer-based knowledge is building at the early age of life because of facilities of getting access to huge online resources. A statistics of Distribution of internet users worldwide as of 2019, by age group from 'statista', says that - 32% of people aged 25-34 years and 19% of 35-44 years old, 18% of 18-24 years old people are using internet among all other aged people [2]. It means the majority of all aged people are on the internet today. Positively people are becoming aware of cybercrimes and they always keep on mind that there are threats like Virus, Malware, Trojan floating all over the

internet. A single wrong click can be devastating sometimes. Consequences of privacy protection failure can do fatal harm to anybody. So this is cyber security and awareness is must and strongly recommended everywhere we go.

2. Analysis & Cybercrime Volume

In this paper, the researchers have investigated several newspaper and reliable internet source to analysis cybercrimes that happened mostly in Bangladesh. People here face problems mainly due to illiteracy and lack of awareness. Let's know about something important of cybercrimes before dig into cybercrimes in Bangladesh.

Cybercrime – crimes where the net and information technology (IT) are applied, e.g., hacking, virus distribution, and organized crime done by usually secret teams or organizations– constitutes the rising concern for governments, organizations, individuals, and businesses worldwide. An investigation conducted in the United States, UK, and Canada have stated that crime and cyber safety incidents are underreported to enforcement. The reasons why this is the fact, however, are not well understood, particularly within the Canadian environment. Risk management, formal education, and dealing best practices were seen to be connected with businesses probability of news incidents to police.

Common Cyber-attacks that Bangladeshi People are facing- some cyber-attacks are listed below---

a) **Hacking:** people in Bangladesh most likely face hacking in social media. This is the most common case countrywide. Most of the people use Facebook. There are 33.713 Million people (19.8% of the total population) using Facebook by January 2019, where men 73.8% and women 26.2% [3]

Analysis clarifies that, lack of security maintenance people fall a victim of hacking resulting private data lost. There are evidence of hacker demanding money from the person whose account got hacked. But most of the cases are for personal issues and hatred. Lack of awareness and security audit users are being hacked through modified software. In Bangladesh, the majority of people are facing cybercrime through Facebook. Facebook is a common site for the users becoming a victim of cybercrime.

Hacking Facebook ID, disabling one's ID because of personal issues only, opening fake accounts, and threading them, inviting people to an unknown group or adding through messenger and sending obscene messages are the common facts in Bangladesh. People are not aware enough to make sure about the security of their social accounts. People from all walks of life use Facebook and maximum are not secured their ID that's why it's being a platform of cybercrime.

b) **Fake income or job scam:** As Bangladesh is a densely populated country and job sectors are limited, people here desperately seek jobs or anything where they can make money. Targeting this fact, evil people publish fake news of alluring jobs to gain attention. People easily fall in the trap.

c) **Online Banking Issues:** As science is making our life easier we are now able to use the mobile banking system. Bkash is one of the popular services of mobile banking in Bangladesh. People use Bkash for money transferring, mobile recharge, paying bills, etc. So cybercrime is often occurred to get money. Many people have faced this kind of cybercrime. They became the victims because of using Bkash. Actually, they can't even feel that they are becoming victims. Cybercriminals offered people some exciting surprises such as lottery by exchanging a poor amount of money or asked for some help service. Some people very easily accept their offers because they do not know about the upcoming results. Just because of their greed they have to pay a large amount of money to the criminals.

d) **Malicious Links:** Sadly, people here got trapped easily in phishing attacks due to unconsciousness. When visiting websites or social media, they often click any link published there. Again people are unaware of spam emails.

e) **Online Shopping Scam:** Nowadays shopping is not boring and difficult as much. People order their products by clicking online shopping sites. Attackers also use this opportunity. Some fakes sites do not deliver the products properly by receiving the payment before delivery. Phishing sites also have given the products through advertisement so that people can catch easily by attacker's trap.

f) **Cyber-Bullying:** Cyber bullying is a harmful term in Bangladesh for girls and boys both. Hackers hack one's data to use as bullying. Attackers blackmail the peoples with their secret information, pictures, or intimate videos. Some have to pay a lot of money for this reason. Sometimes they might have life risks because of this reason.

3. Methodology

This research paper is based on a survey named "Cyber Crime Awareness Survey by CAN Society (CyVengers)" organized under Cyber Crime Awareness and Networking Society of Jahangirnagar University. The goal is to evaluate the present state of cybercrime, providing solutions and raising awareness among the mass in Bangladesh. The responses were treated with confidentiality and only personal information necessary for the survey were collected.

Survey Settings

The survey consists of 35 questions for the purpose of gathering data for analysis. Bangla was selected and used as the base language for the comfort and apprehension of Bangladeshi people. The questionnaire for the survey was created and conducted online using Google forms. Several enquiries were used to specify each awareness activity. The cross-sectional study design was employed to collect data from many different individuals at a certain time period. The variables were remarked with zero influence.

The survey form is divided into four pages. The first page is used for taking the consent of participation from the respondents. The next 3 pages contain enquiries on A. Demographics (10 questions), B. Cybercrime awareness (8 questions), C. Security measures (11 questions), and D. Personal experiences (5 questions). There was another enquiry on volunteer reference name to determine which volunteer they got the survey from. The floating-point data were not replaced with their approximate integer numbers [4].

Selection of Participants

People of different age areas and professions were invited to participate in the survey. It was also intended to reach people from different districts of Bangladesh. The distribution of the survey form was conducted through various social media platforms i.e. Facebook, Whatsapp etc. A non-random arrangement called 'The Snowball sampling technique' was used to select individuals to participate. It is based on the idea of a 'snowball' rolling down a hill and getting bigger in the process. Respondents of the survey were requested to invite more people to participate and thus increasing the number of respondents in an additive manner. A total of 323 responses were received and analyzed to acquire results.

4. Participants Demography Analysis

Of the respondents, 57% were the majority of males as

compared to 43% females which shows a disproportion in participation. Among the 323 participants, 73.1% were of age 18 to 25. Other age ranges were below 15(1.2%), 15 to 18 years(18%), 25 to 35 years(3.4%), 35 to 45 years(2.5%) and above 45(1.9%) which had the second least percentage of participation. The respondents were well educated considering 89.8% of them were students and 51.3% were studying at the university level. The second most number of responses was from non-government workers(5.3%). Other professions included government workers, teachers, housewives, news reporters among others. So it can be said that young students tend to show more interest in volunteer works like surveys whereas people in their mid-forties and above were almost unwilling. It may also indicate that young people are more prone to Internet addiction [5]. The survey covered a lot of districts where the capital city Dhaka produced more respondents. 264 of the participants were comfortable with sharing their names.

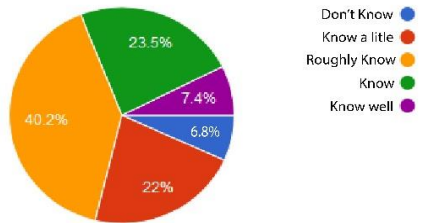
5. Nature of Cybercrime

Cybercrime has many aspects to it. It emerges in different forms through various technological platforms. In Bangladesh, however, most cybercrimes tend to occur through social media and money transferring outlets. On social media platforms like Facebook, WhatsApp, the crime is most likely link-based. Victims get click baited through adds or messages and thus have their personal information compromised. Bkash is a famous money transferring platform in Bangladesh whose security is based on pin numbers. If somehow that pin number stands compromised, people may lose their money. There are a lot of other ways people are victimized in cyberspace. It can happen through online shopping, surfing the web, downloading bogus applications or files, accidentally logging in to mock sites without noticing the URL. People are bullied, threatened on social channels. Because of the fast track development and implementation of cyberspace, the nature of cybercrimes is ever-changing.

6. Cyber Awareness

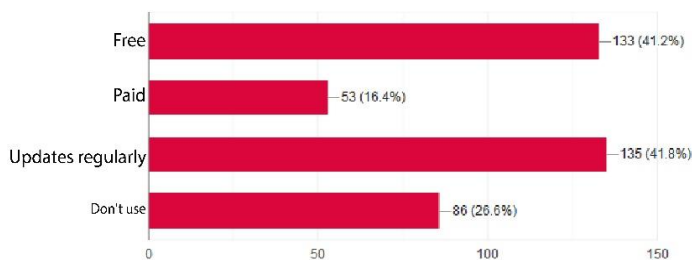
Respondents were asked if they were familiar with certain terms i.e. cyberbullying, phishing, etc. And if they or any of their acquaintances had ever faced any form of cybercrime. The responses showed almost 50/50 relevancy on the term knowledge.

People's Knowledge About Cybercrimes



When asked what they think they should do in case of any such incidents, 75.9% of respondents thought of taking help from the law. The survey also enquired through several queries on what kind of things they did to pertain to their safety online. These things include using antivirus software, logging out of third party applications, securing their accounts, changing passwords regularly and so on. People seemed to be more aware of prevention methods than steps to do afterward. But this awareness does not live up to the expectations. According to the survey, some people don't even feel the need of using antivirus applications. Among people who do use antivirus software, only

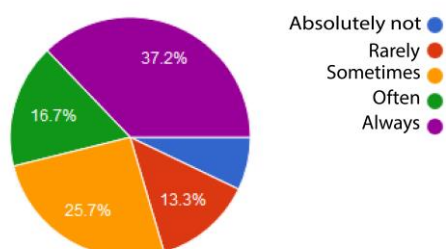
How do people use antivirus



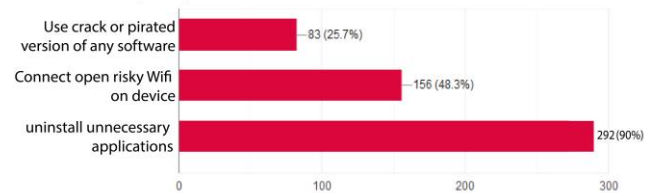
7. Analysis of People's concerns

Irrespective of people's knowledge of cybercrime and security, they have shown concerns regarding their safety in cyberspace. There were concerns about links they clicked on (46.1%), terms and conditions of applications, their social identity being hacked, and so on. But that doesn't stop them from making poor decisions that put their safety in danger. 25.7% of participants use various cracked or pirated versions of applications. When asked only 17.4% of people were confident enough to admit they felt safe online.

People's Feedback on consciously clicking links of websites



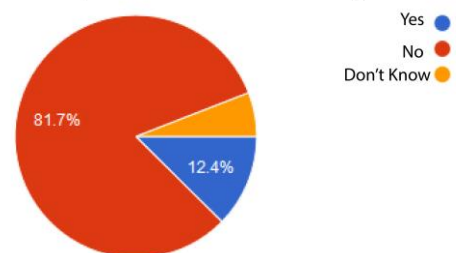
The works people do-



8. People's Experience

Most of the people had done nothing when they got attacked. Almost one-third of the people said they knew about their acquaintances being a victim of cybercrimes but were unaware of any actions taken afterward. It means people tend to share their accidents with people they know rather than experts or law enforcement authorities. But there were positive answers as well.

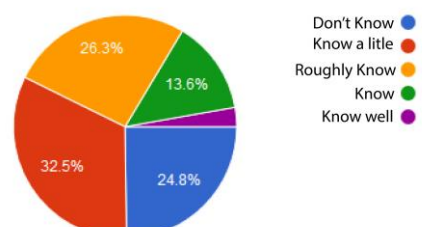
People who have faced Cyber-fraud



9. Cyber Laws in Bangladesh

The government of Bangladesh decreed the ICT Act with a maximum of 14 years punishment and a minimum 7 years to mitigate digital crime. But the conviction state is poor[6]. The Cybersecurity strategy was also introduced in 2014 with the purpose to safeguard the cyberspace for national security. It is in agreement with the IMPACT(International Multilateral Pact Against Cyber Threats)[7]. According to the survey, only 2.8% of the participants admitted to completely being aware of the laws set to protect them.

People's Knowledge About Cybercrime Laws



10. Results

The survey leads to the fact that the present state of awareness and security against cybercrime in Bangladesh is indigent. People have minimal knowledge of cyberspace and its safety issues. They show a level of reluctance to even take the necessary steps once faced with it. Familiarity with types of cybercrimes was also poor. We don't have strong enough jurisdiction system to curb the risks and implementation of the existing laws aren't up to the mark. However, the survey also revealed more awareness among the younger generation which gives a ray of hope for the future.

11. Conclusion & Future Works

It's obvious that more work has to be done to raise awareness about cybersecurity. The dream of Digital Bangladesh can't be fulfilled unless more focus is put upon this topic of cyberspace. To that end, things like dedicated week or month programs can be launched. More research and work needs to go into cyber laws and their implementation. What is needed is a willingness to pragmatically bring about a safer change in cyberspace for people's own safety.

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