1. Cybersecurity

What does it do?

With the extraordinary development of the Internet these days, people have connected each other around the world. Furthermore, digital transformation has also changed the way that people work and live. So that we can easily send photos, collaborative work documents, group assignments or transfer money worldwide with just a simple click via a bank applicant right now.  

Besides with so many advantages of the connected work right now, people still must face another threat called cybercrime. Over the past few decades, technology has become an increasingly integral aspect of the workplace. And, it is a key driver of economic growth, as it also brings about new security challenges. Every year, organisations lose billions of dollars to cybercrime – it is a huge loss and unsolved problem for many companies now. That is why cybersecurity is very important right now to fight cybercrime.

Cybersecurity is the practice of protecting organisation systems, networks, and programs from cyberattacks. These attacks are usually tried to access, change, destroy important information, extort money from organisation; or interrupt normal business activities to stop the growth of that organisation (What Is Cybersecurity?, 2020).

For successful protection from cyberattacks, a cybersecurity approach needs to have multiple layers of protection that cover across the organisation computers, networks, programs, or data that one intends to keep safe.

Technology is essential to give organizations and individuals the security tools needed to protect themselves from cyberattacks. There are three main things must be protected all the time:  working devices like computers, smart devices, and routers, networks; and the cloud. And there are some common technology tools that used to protect these things over the past until now such as firewalls, DNS filtering, malware protection, antivirus software, and email security. Beside normal common technology tools, there are some the states of the art of cybersecurity methods such as moving target security, air gapping, cooperative cybersecurity, and next generation firewalls right now (Victories, 2020).

Moving target security - This method of security is used by numbers of leading companies to protect their organisation network systems. This method will mix up the names, references, and locations of files in the server’s memory, and the application by itself to make it more complicated and more difficult for a malware to infect or detect a system. To make this method more powerful, so each time the computer is rebooted, all the names, references, and locations of the files in the server are re-mixed, to ensure that the system will have different configurations all the time.

Air gapping is the security method used for military defence or running nuclear generators.  This method will isolate a system from both sides- the first side is local networks and the second side is the internet so that there is only one way the systems could get assessed is from someone getting physical access to the system itself. This is one of the most tough solutions now for keeping exceptionally important data that needs to be stored and protected with highly security.

Cooperative cybersecurity- Another new method is known as cooperative cybersecurity which means multiple organisations will work together to store each other’s data as a data-sharing alliance. So that if cyberattack happens to steal important data from one organisation, the hackers need to access all the systems of the alliance. Unable to do this means hackers cannot do anything harmful to the important data.Statistically, the chance of successfully hacking for that kind of cyber defence is very low. And if hackers can do that, they need to find a way to unencrypt what they found.

Next generation firewalls - Normal firewalls are nothing new for all the users or organisations, however, a new next generation firewalls now exist that take system protection to the next level.  The next generation firewall protects websites and web apps from virus, ransomware and malware infections while preventing intrusion from hackers and blocking distributed denial of service attacks. A next generation firewall is designed to keep offering high performance threat protection.

What is the impact?

Nowadays, sometimes we can read many shocking news about naked pictures of famous celebrities or private importation of users sold for marketing companies. They are happened quite often these days because hackers now have created many tools to get accessed into our systems such as computers, smartphone, routers or even our camera systems. And as we all know that we are living in the digital age, so that everything we do is always connected to the internet, including our social media, our communications, our entertainment, our online shopping, or online banking, and even our medical histories and prescriptions.

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Especially social media flatforms such as Facebook, Instagram, or Twitter with millions of people using right now to share our experiences and pictures with our families and friends. Day by day our information will grow on the Internet such as our family backgrounds, our friend relationships, employer details, our bank accounts. And of course, we are not award of this information very important for cybercrimes using it to attack our systems.

 With each convenience that technology has brought into our lives, the level of inconvenience has also been raised by making it easier for cybercrime to obtain our personal information and private records and it is hard for us to prevent our private things(What is Cyber Security and How Does It Affect You?, 2020). By seeing what the social media users does not, cybercrimes are rising nowadays by sending scams, faked receipts or withdrawing money from users’ bank account. So, with the exist of cybersecurity these days, internet users will be safer and more protection when using world wide web.

Cybersecurity will protect our electronic data by preventing, detecting, and responding to any cyberattacks from cybercrimes. If all users and organisations equip themselves about cybersecurity, there will be no cybercrimes out there. Therefore, the organisations will not lose the money and no one will lose the job.

How will this affect you?

Before understanding much about cybersecurity, I just shared and posted whatever I wanted on my social media, even some personal information. But cybersecurity just changes the way I experience the Internet. Now I treat my personal information like my cash, so I do not leave my information lying around, I just share about them when I really need it by authorised people because cybercrimes can use certain combinations of anyone’s personal information apply for credit cards and bank loans, or commit crimes.  

Additionally, I do not leave my devices unattended anymore and I put more layers of security by adding passcode, fingerprints, and face recognition. And I protect my email and my mail from information breaching. Using antivirus for my computer and internet security will help me reduce the risk from cyberattacks, besides that I will tell my families and friends manage their social settings to keep their personal and private information locked down.  Not only me changes the thought of cybersecurity but also my families are award of cybersecurity very extremely important for us right now. Now we need very careful about sharing my information online and secure our router as much as we can by not downloading any unauthorised programs or opening unknow attachments.

1. References

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