**CYBERSECURITY**

In our current age of society, information is an increasing component in human development, combined with the vast amount of technology we have today we as people are able to have digital information and networks to run organisations, businesses and institutions. Unfortunately, all systems, networks and digital information is vulnerable to cyberattacks, which are digital attacks on the systems, networks and digital information of an organisation with the purpose of obtaining or destroying sensitive information, extorting money and disrupting organisations. The practice of preventing and protecting against this is called **Cybersecurity**. Implementing efficacious cybersecurity actions is a priority because in today’s age there are more devices than people and there will always be constant attackers trying to access other’s information for their own benefit. Cybersecurity relates to having multiple layers of protections on devices, programs and networks. Currently in today’s age the layers of protection can range from the new technology on our devices to the users own understanding of the threats to their data. As everyday users of technology, we must be aware of the dangers by learning and complying with data security principles. For example, we can keep our devices software up to data which updates potential bugs and exploits, preventing risks of losing your data. We also can have passwords with a strong mix of different characters and numbers which protects unwanted people from accessing out accounts and we must be aware of any suspicious files or URLS which can spread malware to devices. Technology is essential in cybersecurity because it stops attacks during and before they even happen. Common technology such as firewalls, DNS filtering, antivirus software and malware protection can provide cybersecurity for individuals and organisations. A firewall is a network security software that monitors incoming and outgoing network traffic for a device and decides what gets passed to the device based on inspections and user decisions. Domain Name System filtering or DNS filtering is a filtering/blocking method that is implemented into devices to prevent the user from easily accessing malicious websites or IP addresses, this works by remembering malicious websites and IP addresses and blocks them when users try to access them. Antivirus and Anti-malware software are aimed to detect and remove viruses and malware that entering your device or on your device at the time. All of this together forms the National Institute of Standards and Technology Framework which aims to recover data, identify dangers, protect devices, detect issues and respond to them. Cybersecurity is important for anyone and for any organisation because an attack can lead to a loss/leak of private data, ensuring that the correct methods of cybersecurity are implemented means that it keeps our everyday lives running the way they should be. In the future cybersecurity will be able to support organisations, individuals and even nations more efficiently and effectively. This will be possible because nations along with organisations will continue to develop cybersecurity technology. In the future advancements of information technology, we expect there to be more devices that are with our everyday lives such as cars developed from automation engineering. With more technology leads to more chances of cyberattacks because technology would be denser among society, the increase of technology leads to the increase of more cyberattacks which causes the booming development of cybersecurity in everyday life.

The potential impact of the booming cyber security industry is the reliable security of technology. The things most likely to change along with the development of the industry is the development of cybercrime. With the development of technology, more criminal groups will turn to or continue to seek ways to cyberattack for financial gain and potentially terrorist groups will move into the cyberspace to inflict harm. To counter this the nations and organisations of the world will develop more cybersecurity technology to protect the cyberspace. From the development the people that are most affected are individuals and organisations. As individuals, we will have more reassurance when it comes protecting our data stored online and on our devices because of new and stronger technology of cybersecurity. For organisations that people rely on such as powerplants and hospitals will be secured from cyberattacks because of the newly strong and developed cybersecurity infrastructure which will allow organisations to run smoothly. This will create a lot of jobs as individuals with cyber security skills are highly wanted but are in short supply. A Cisco report on cybersecurity skill shortages states that there were a million cybersecurity related jobs open globally and that the demand is expected to rise to million in the year of 2019.

In my daily life, the cybersecurity software will provide helpful in securing my data on devices by protecting it from malicious attacks. But most importantly, my cybersecurity principles will affect me the most because I will be aware of all the dangers and I will utilise strong passwords and my knowledge of avoiding malicious sites/files to protect my data. I also use online services such as discord and google drive to keep data and the development of cybersecurity infrastructure will protect them thus protecting my data store on their servers. For my family and friends that have devices, they will be able to utilise the same knowledge and software that I process to help protect data which will allow our daily lives to run as smooth as possible thanks to the reassurance from cybersecurity.

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