

## **Bibliography details**

**Name of the Serial/Publication:** Veritas

**Volume No.:** 1

**Issue No.:** 1

**Month & Year of publication:** August 2021

**Page numbers:** Feature Articles (64-66)

**Title of Article:** Cybersecurity: Using Data everyday

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# CYBERSECURITY: USING DATA EVERYDAY

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Cybersecurity is the protection of computer device networks and everything that falls into the definition of computer according to the United Nations Congress. With the advent of technology and the recent developments in the field of information technology, we require a very strong system of what we are doing using this technology so that we will be safe and we will not be vulnerable to any sort of criminal activity. Every day there is some new technology that is developed. New software, new websites, new games, new applications, new reveries of computers and mobile phones, a new type of communication among many others are developing at a rate that cannot be comprehended. In this digital framework, many of us cannot live without our phone or devices for even ten minutes. For our everyday life, we look for some form of technology that is there to be of some assistance. A very simple example would be a smartwatch that is gaining more importance than other watches and ultimately becomes a part of the Internet of things (IoT). All of these systems, all of this software and application that we are using day in and day out, are handling some amount of data if not all the data. Any type of device you may use will be processing some data or the other. The question is - what data is being handled by that system or interface and what happens to the data once the job is done? It is surprising to see many do not know the nuances of these processes.

An example of an application that could properly help you communicate with other people. Using the same application you are not only able to message them but also video chat with them using the internet. There are numerous applications available for performing these functions, but we do not know the source of these applications or the owner of these applications. Maybe we would be able to say that this application is owned by this particular entity, but we cannot say that for all the applications that we would be using. Take your mobile phone, for example, you would have installed applications on the phone, that you don't use anymore, or you

just wanted to try. For such applications to function, certain permissions need to be given to the application. In this manner, we are permitting the application to access a variety of data on our devices.

Think larger now, our mobile phone is connected to the network in your home or workplace, does this have an effect on the permissions you are giving?

For example, many of us download applications from the internet onto our computer systems. During installation, the application will ask you to check certain options. How many of us read the options and the conditions associated with them?

One of the options may suggest an additional toolbar may be installed on your browser. Well, that doesn't really cause much trouble, so that's not an issue but with many applications when they give the particular option they also install other types of programs on your system without your knowledge and the next time you use your system you will be able to see certain other application that may pop up at the start of the system, or suddenly be executed when you are not aware. Many different types of websites will open without you even clicking on any links. Your system might become slow because of the running of unwanted programs that you have installed (without your knowledge). Now that is just one part of the incident.

Whether it is a computer system or your mobile phone, we need software and applications to perform various tasks every single day. To get more information and knowledge we may have to visit numerous websites. Whatever we do whether we click, swipe or type there is a portion of data that is getting transferred or exchanged and as lay users of this technology you wouldn't know what that data is because we are happy that we are able to carry out our day-to-day activities. From a perspective of cybersecurity we would want to know what is the data that is getting transferred, where is the data destined to go and from where did the data originate.

You wouldn't really know this until you know your computer system in and out. Such types of incidents can transmit data from your system to another person or from another system to your system. When we talk about data transfer it is not only about information but it could be a set of instructions. A set of instructions is also known as a software and a software can be good and also be bad because a virus is a type of software.

Information technology is a very good day, but as an apple can be eaten as nutritious food, an apple can be poisoned and used with a wrong intention, in the same manner, information technology can be used in both ways or the data involved can be used for the right or wrong purposes. As users of information technology, every individual needs to take care of what they are doing using this technology, like which site are you visiting, which applications are you installing, which software are you buying, to whom are you giving your system for repair or service, to whom you are giving your mobile phone or computer system to use, what is the type of transaction that you are doing in your mobile phone, how are you using your online banking system, etc. All such activities involve the transfer of data. The data transferred with and from and to your device should not be misused, should not be tampered with, and should not be stolen. Keep data safe and keep yourself safe.

Myth - Time of death/Post-mortem interval (PMI) can only be determined by physical changes in the body

Fact - Insects can be used to determine the PMI by studying their life cycle when found in the body. This is known as forensic entomology.