



Cyber Security Centre of Excellence

West Bengal

Department of Information Technology & Electronics
Government of West Bengal



DATA AND INFORMATION

Today we are in a world of disruption and never before in the history of mankind information has been so strikingly fast and with lightning speed. From the analog to the digital world there has been a major transformation and a transition in the mode of transmission of information and data. Primarily it is an analogy that information is data and again data is information, so both of them go hand in hand and since ages from days of World War I and before information has been the key and the truth behind it, when we speak of “TRUTH” many such words same as “authentic information”, “genuine information”, “correct information” and the “information on the right time” comes to our mind. In fact, the entire hemisphere has been running after information and the right information. Primarily, research says that it is often very difficult to have the right information in place and also secured information which protects an individual and the society, the paradox of which is how much of it is authentic and how much of it is diluted and if manipulated to what extend and where is the source and the destination. Primarily, it is the source and the destination that matters and we do find many ‘Man in the Middle’ attacks which do dilute the information or rather the secured information. World politics and dynamics have been moving on this backbone and that is information security and the data that is running with it. Mysterious as it is and always an enigma the flow of information and information security wherein the greatest minds and organisations have been trying to protect information and data of course, how much that has been achieved is still a question mark with the number of “FRAUDS” and “LOSS OF IDENTITY” and they are misnomers who dominate the internet traffic and could be lying deep beneath surface of the internet which is the “Dark Web” and believing that would be the core of the information and data, and when it comes to data security it has mostly controlled that very layer.

So, what is the medium of information, well is it ether? OR the space and its transmission in waves in a spectrum or frequency, well that the trick how do we transmit that on a secured medium using the crypto algorithm and the hash codes, are we using SHA or MD5 or is it the 256 bit secured crypto numbers, every bit of it is information and the ways to protect that data which is transmitted in packets with a header and an information element and Yes for the right information in the right pace the beating the errors a Cyclic redundancy Check. (CRC).

So, ubiquitous as we are and we need to protect the data which is the “key” to the identity of an individual, organisation and country. It is the identity that matters and all that is to play to protect the data to save the identity and the information that it carries whether it be the social or financial transactions. More of information and more of security to the identity more is the security which is today very much famous and known in the modern world as information security in the Cyber space. Oh Yeah! Seeming we are inching forward from Information security to Cyber Security which is a web today and of course a pattern which is forms the DNA of information and information security. That is again we bounce back to Data Security, Data privacy and the jargons to it to protect one’s identity. The electronic media would seemingly have its interpretation for the transmission of data and data security across different platforms which are platform independent and most of them ubiquitous in nature and the control is moving by leaps and bounds across various layers in a stack and the various protocols to maintain the balance of its availability rather High availability V/s to the security and protocols to have it all in the cellar and being protected across people,



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societies and domains with the cryptic language and it is coders and its decoders. Again all of it is to provide the right the accurate information in the right time and to the right people. So, we are in myriad of gadgets and technology that is transforming and evolving day by day with security protocols on the surface of it with firewall and endpoints all to protect the Data and Identity what we today term as cyber security that is protecting the medium that is transmitting this information.

However, the world has seen enough with the cyber part of it as it evolves and various Original Equipment Manufacturers try using their tools to protect that very data and information which is transmitted from the source to the destination and being stored in a definite place. Why all that and ALL of it is to protect the data and the information. Be it Facebook or Google they are all in this game and we are paying for it. Primarily, dominated by the US and in North America this magnanimous data is stored in secured layers of information security to protect the data and of course, be in the developing countries like the Indian sub-continent we are in the effort to transform this organic data into organised data and then process for a population that is one third of the entire world population, what is actually we are processing, well, it is actually that the data and the information that it carries as already mentioned it could be social, financial or the national security of a country and goes up to the missile frequency. How gigs of we don't know or God Damn it, but we want the information to be secured and that data with it. That is all about information security and most of it is about the awareness of protecting our own data and privacy which is our information and that could destroy an individual, an organisation and a nation. Who are the Carriers of Information and it is most critical to first secure them and their nodes such that information is not leaked out. Information leaked is information insecure and information insecure is data manipulated whether it again be Bank Account numbers, Names, source, destination or God damn any of it.

So, the main motive is to protect us and ourselves and that is only possible through awareness and Cyber awareness which is basically the medium of data transmission the receipt of it being very critical and important. Protecting our desktops, laptops and mobiles or being provoked to information where we intend to loss information trying to gather information from sources which are false nodes which are the tentacles of cyber-attacks or attacks by an individual or an organisation or even a country. So, let us be responsible to protect our own data and our own information being very careful with the devices, gadget and the provocations that are there only to steal your information and to destroy you which is after all when in the web is all manipulated and for social or financial gains and we do not know what is the actual motive in this free world of data and information. Again protect your data and your identity whether it be your social security number, Aadhar number, mobile number and anything that could destroy one's family and the society.

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