Towards a Cyber Secure Global Village

Praveen Kumar Khosla, Prabhjot Kaur, Rishamjit Kaur, Kashish Chachra

The Covid 19 pandemic has led to loss of lives, as well as, loss of livelihoods. In this scenario, where the situation demands people to be physically distant, it is the might of IT that has brought people and the world closer. The intervention of IT has allowed us to address and mitigate multiple challenges posed by the pandemic to a large extent, if not completely. The perils of Cyber Threats have coexisted with the progress of Cyber Space since the very beginning. However, with increasing reliance on the internet, this ever looming threat to Cyber Security has been put into the spotlight. The Global Risks Report 2021 of the World Economic Forum cites Cyber Security as one of the top four domains of concern.

We are all familiar with the adage that the "Internet has converted this world into a Global Village." This notion, although fairly accurate, is fanciful and romantic at the same time. There are many deterrents that come in the way of making this Globe into a robust and secure Digital Community. With close to two hundred countries in the world, being on the same page and formulating a inter-nation policy framework for Cybersecurity becomes a formidable challenge. All the dimensions of Cybersecurity such as Awareness, Policies, **Interoperability**, Technologies for Incident Detection, **Sharing** Threat Intel, Trained Workforce, and Automated Response Technologies need to be addressed.

This paper enumerates the challenges and also the measures that shall be undertaken in order to allay the aforementioned challenges. It discusses and explains, among other things, the need to:

- Ensure that all internet traffic goes through gateways/routers;
- Deploy large scale honeynets;
- Process the colossal amount of logs by leveraging machine learning;
- Introduce Open APIs, Taxi servers and clients as the drivers of interoperability.;
- Share cyber information from disparate sources of threat intelligence for creation of situational awareness framework.

Achieving absolute harmony in these spheres may be a utopian dream but still, all the countries and stakeholders must pursue to formulate a common, basic, and a collective Cybersecurity architecture. The paper goes on to suggest measures which can be taken as a step towards this direction.