Critical infrastructures and complexity essay examples

Law, Security



The first answer to the question agrees with the statement in the question and mainly focuses on the fragility of infrastructures of today's world on the basis of cyber attacks only. It is highlighted in the answer that various organizations today work on databases developed to support operate. These databases are vulnerable to cyber attacks and hence pose great threat to the organizations. This analysis is quite right however most of the organizations keep their official data on a Virtual Private Network (VPN) or at least use a firewall to protect their data (Ted & Lewis, 2006). Furthermore there are many back up techniques used which keep a back up copy of the system data so that if the data is lost then it can be recovered again. There are few other steps mentioned in the answer which are of great significance for infrastructure security.

The second answer to the question also agrees with the idea that today's infrastructures are more fragile than the ones in 1950s and explains the reason of the fragility as internet. In this answer the basis of placing the blame on internet is briefly described that it is the nature of internet that it has huge size and connectivity so there is difficulty in maintaining the security of organizational infrastructure. This answer focuses on the increased chances of cyber attacks due to the humongous size of internet users. This answer further argues that the infrastructures in 1950s were of tangible nature so the monitoring of these were an easy task due to clear visibility, however in cyber world, the attacks can come any time from any source and undercover in undetectable way (Ted & Lewis, 2006). This answer tell vaguely a way to protect the infrastructure through knowing the threats, however this point requires more detailed analysis since it is simply

not possible to know the threat's time, location etc in cyber world. This answer tells us to keep alternate plans for system protection, what are plan b, c, d etc?

The third answer also agrees with the idea that the today's infrastructures are more fragile than the ones in 1950s however there exists a difference of opinion in this answer from the other two answers which is the basic reason behind this fragility. This answer rejects the idea of cyber attacks to be the root cause of infrastructures fragility and tells that the definition of critical infrastructures has been changes since 1950s and hence poses threat to them due to their inter-connectivity. This answer tells that the interconnectivity of critical infrastructures today leads to clustered collapse of them. This answer has described the interdependency of the critical infrastructure without specifying the medium through which they are linked (Ted & Lewis, 2006). If these critical infrastructures are linked through internet then isn't the reason mentioned in this answer is the same as mentioned in the first two answers?

References

Ted G & Lewis. (2006). Critical Infrastructure Protection in Homeland Security: Defending a Networked Nation. San Francisco, CA: John willing and sons.