Module 10 – Written Exercise Chapter 10, Exercise #11 (Cloud Computing Security)

Using your favorite search engine, or the resources of your library, identify firewall issues that might arise for a company that uses cloud computing in its online sales system. In about 100 words, summarize your findings in terms of the perimeter expansion problem.

I feel that the perimeter expansion problem is more prevalent since the CoVid 19 pandemic hit than it was before that. Many companies already had to deal with remote working for some of their employees or salesman, but a lot more companies had to switch over to that form of office environment once the pandemic hit. The problem lies in the fact that all of these "outside" computers are trying to pull from the company's internal systems or cloud file systems. Each outside computer could have a hidden virus or worm on it. Companies can build strong internal firewalls on their internal systems, but each extra computer accessing the system might or might not have strong enough virus protections or firewalls to keep everything safer.

Cloud computing is supposed to make it easier to share files and data between employees, clients, and management. It does do that, but it exposes an extra risk to all the data within the system. The cloud computing server itself could get infected or broken into. Every person's computer has more potential virus access points to try to sneak into the cloud computing system when they access it for work as well.

Just to give an idea of how vulnerable we are making ourselves, here is some information from a couple articles I read. In 2019, an article was written by John DiLullo about our ability to secure corporate networks with cloud computing involved (DiLullo). He stated that it was estimated that 27% of data flow traffic would be going back and forth to the cloud by 2021. Out of curiosity I googled "what percentage of corporate data flows back and forth to the cloud in 2021". The answer is staggering. An article from March 2021 stated 85% of businesses worldwide use cloud computing for data storage, and 96% of the companies use at least one cloud-based service in 2020/2021 (Bulao).

Works Cited

Bulao, Jacquelyn. How Many Companies Use Cloud Computing in 2020? All You Need To Know (https://techjury.net/blog/how-many-companies-use-cloud-computing/). 19 03 2021. website. 21 04 2021.

DiLullo, John. *HelpnetSecurity.Com* (https://www.helpnetsecurity.com/2019/04/18/secure-vanishing-perimeter/). 18 04 2019. website. 21 04 2021.

Schneider, Gary P. Electronic Commerce Twelfth Edition. Cengage Learning, 2017. book.