Flash Research Assignment: Virtualization and Cloud Computing

If we take advantage of utilizing virtualization to consolidate server workloads, our 3-year net benefit is 9.2 million dollars. From our research, every 10 physical servers could be consolidated into a single virtual machine server, and it can capture up to 80% of our current servers.

Server virtualization allows our organization to achieve high levels of consolidation, such as a 10 to 1 ratio. Therefore, we will reduce the number of physical servers from 1,000 to 280 including 80 virtual machines under VMware. One obvious benefit of server virtualization is image-based backup and restoration. Virtual machine will be able to back up and restore it entirely and make the recovery process much easier. Not only does virtualization help to reduce the number of physical servers in our organization, but it also increases IT agility and flexibility and creates significant cost saving of system software and maintenance.

Once we take this into account, the costs of implementing our physical servers will be reduced from 8 million dollars to 2.88 million dollars. Additionally, the cost of maintenance for both types of servers will also go down from 6 million dollars to 1.92 million dollars over 3 years. Therefore, the 3-year net benefit for our company is 9.2 million dollars.

## Work Cited

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