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Flash Research Paper Two

 Virtualization

By utilizing virtualization to consolidate our data centers we would see a net benefit of $9.2 million. Our current data center consists of 1000 physical machines that take up space and require thousands of dollars in maintenance per machine. By upgrading our servers to utilize virtualization, we would decrease our servers to 280 and save money from the maintenance of these machines.

 Virtualization allows “multiple systems and software operations to be run on one virtual server” (VMware), which decreases the number of total servers that we require. Utilizing virtualization would let us decrease our physical servers from 1000 to 200 and have 80 virtual servers. In total, we would see a server consolidation of 1000 to 280. Physical servers, on average, only utilize about “5 to 15 percent of their total capacity”. (VMware) Because virtual servers are able to run multiple systems and software applications, virtual servers have a higher utilization rate.

 Upgrading our data center to utilize virtualization would cost $4.8 million over a three-year period. Continuing with our current data center and replacing the 1000 physical servers would cost us $14 million over a three-year period. The total three-year net benefit of implementing the virtual machines would be $9.2 million.

Works Cited

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