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Virtualization and Cloud Computing

Converting 80% of our physical servers to virtual servers using VMware will realize a \$9.2M three-year net benefit for our company. Virtual Servers can compress server workloads so that ten virtual machines can run off of a single physical machine, resulting in fewer physical servers needed to run our data center. Implementing virtual machines and through virtualization will result in significant cost reduction for our company.

VMware software converts one physical server into many virtual machines using virtualization. Most of our servers use less than 20% of capacity, however through virtualization we can increase this efficiency to at least 60%. This increase in efficiency by using virtual machines will result in our data center requiring fewer physical servers. Each one of these virtual servers will run separately as a physical machine with its own virtual CPU. Minimizing servers increases processing power while reducing the number of servers and energy costs in the data center simultaneously.

The three-year cost of installing virtual machines will be \$4.8 million which includes the 200 physical servers, 80 virtual servers and their maintenance. ensuring a significant return on investment. The three-year savings from using VMware will be \$14M by avoiding the cost of 1000 new servers and their annual maintenance. These cost savings will provide a three-year net benefit of \$9.2M for our company. Given these metrics, switching 80% of our servers to virtual servers with VMware will realize considerable financial value for our company.

Works Cited

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