Nicholas Gormley Feb 27, 2017 Flash Research Paper Virtualization and Cloud Computing

Implementing VMware will save our company our company \$9,200,000 over the next three years. VMware allows multiple servers to be built, hosted, and delivered through a cloud service via the Internet. Along with saving money and space, cloud based servers offer a variety of features that make them superior to their physical counterparts.

Physical servers require investments in hardware and infrastructure, as well as physical space to house the machines. Using cloud based servers we are able to fit 10 servers onto every virtual machine. Switching 80% of our 1,000 physical servers to virtual machines would only require 80 virtual machines, ultimately saving implementation costs, maintenance costs, and physical space. Other advantages cloud servers have over physical ones are stability, security, speed, and scalability.".

Switching 80% of our servers over to the cloud will save us \$5,120,000 in implementation compared to the cost of implementing 100% physical servers. Running 10 servers per virtual machine greatly reduces the maintenance cost, as well costs for housing physical units. Maintenance costs after the switch from 100% physical to an 80% physical/20% virtual ratio will reduce by \$1,360,000 per year. Over the course of a three-year period, our company will save \$9,200,000 in total by switching 80% of our servers over to the cloud.