To: Mart Doyle

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Flash Research Assignment: Virtualization and Cloud Computing

We should consolidate our server hardware with VMware in order to save $9,200,000 over a three-year period. The VMware that would replace the physical servers could put ten physical machines onto one virtual machine. This move would reduce our server count from 100 to 280.

Virtualization utilizes software that simulates the existence of physical hardware to create a virtual machine. We would be able to convert 80% of our physical servers into virtual machines. VMware gives us the capability to consolidate 10 physical machines into one virtual machine. In the end, we would go from 1000 servers to 280.

The 1000 servers we currently have will cost us $14,000,000 over a three-year period. This includes the cost of the server, software maintenance, technical support, power and cooling costs. If we implement VMware it will only costs us $4,800,000 over a three-year period. This would give the company an overall net benefit of $9,200,000 over a three-year period.

**Current Costs**

**Server Cost**: 1000 x 8000 = $8,000,000

**Maintenance Cost**: 1000 x 2000 = 2,000,000 x 3 =$6,000,000

**Total Cost** over three years is $ 8,000,000 + $6,000,000 = **$14,000,000**

**VMware Costs**

**Server Cost:** 200 x 8,000 = 1,600,000

**VMware Cost:** 80 x 16,000 = 1,280,000

**Maintenance Server**: 200 x 2000 x 3= 1,200,000

**VMware Maintenance**: 80x 3000 x 3 = 720,000

**Total Cost:** **$4,800,000**

**Benefit of VMWare =** $14,000,000-$4,800,000 = **$9,200,000**

Works Cited

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"Server Virtualization & Consolidation." *Server Virtualization & Consolidation*. N.p., 24 Feb. 2017. Web. 24 Feb. 2017. <http://www.vmware.com/solutions/consolidation.html>.