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2/25/13

The aggregate use of hardware in our data centers is costing the company \$14 million every three years to run. The cost of server maintenance is also costing the company \$2 million. By implementing the proposed idea of VMware virtualization for 80% of our servers, not only will the company save \$9.2 million, but it will require less hardware and energy usage because of server consolidation.

The implementation of VMware virtualization will virtualize hardware and software applications. The way this works is through VMware's use of server consolidation. The function of server consolidation is to reduce the total number of servers or server locations that an organization requires. What this translates to is that the total number of servers in a data center can be divided by 10. So if a company has 1000 servers, the implementation of VMware server consolidation would cut that total number to 100. VMware virtualization has many other capabilities, but server consolidation alone brings benefits such as reduced floor space, power consumption and air conditioning costs.

By continuing to use traditional servers, our company is missing out on saving \$9.2 million. As a company, our costs currently total \$14 million. This includes the 1000 servers which are \$8000 per server as well as their total yearly maintenance of \$2 million. Switching to 80% usage of VMware servers and 20% usage of traditional servers will significantly reduce costs due to server consolidation. The cost of initial implementation only costs \$2.88 million with an additional total cost in yearly maintenance of \$640,000. The investment in VMware virtualization totals \$4.8 million, which translates to \$9.2 million for return on investment for 3 years.

<b>As-Is Costs</b>	<b>YEAR 1</b>	<b>YEAR 2</b>	<b>YEAR 3</b>	<b>TOTAL COST AFTER 3YEARS</b>
Traditional Servers (1000)	\$8,000,000	\$0	\$0	
Maintenance (1000)	\$2,000,000	\$2,000,000	\$2,000,000	
<b>Total</b>	<b>\$10,000,000</b>	<b>\$2,000,000</b>	<b>\$2,000,000</b>	<b>\$14,000,000</b>

<b>To-Be Costs</b>	<b>YEAR 1</b>	<b>YEAR 2</b>	<b>YEAR 3</b>	<b>TOTAL COST AFTER 3YEARS</b>
200 Traditional Servers	\$1,600,000	\$0	\$0	
80 Vmware Servers	\$1,280,000	\$0	\$0	
Maintenance (200 Servers)	\$400,000	\$400,000	\$400,000	
Maintenance (80 Vmware Servers)	\$240,000	\$240,000	\$240,000	
<b>Total</b>	<b>\$3,520,000</b>	<b>\$640,000</b>	<b>\$640,000</b>	<b>\$4,800,000</b>

## Works Cited

“Virtualization and Consolidation Solutions”. NEC. 25 February 2013. Web. 25 February 2013.

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