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<p style="text-align: center">Virtualization and Cloud Computing</p>

Our company can realize a 3-year net benefit of $9,200,000 if we consolidate most of our servers to VMware. Since we are at the start of a hardware refresh cycle, it is a cost-effective idea to implement this new technology. One key capability of VMware is that it will allow more physical space by eliminating most of our servers.

By using virtualization, we can partition 80% of our 1000 physical servers into virtual machines. More space allows for future expansions in our company. This technology allows ten physical servers onto a single VM so that our company will only have 280 total servers. In return, this reduces maintenance cost both to software and hardware. Also, cooling and power are at a reduced rate due to the virtualization.

The virtual transformation of servers, it will cost $4.8 million for 80 VM's and 200 physical servers in three years. However, we will save $14 million by eliminating the 1000 physical servers and maintenance costs. In return, our company will see the 3-year net benefit of $9.2 million.

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	Year 1	Year 2	Year 3	Total
Costs Avoidance				
Eliminating 1000 servers	8,000,000	0	0	$8,000,000
Eliminating 1000 server maintenance	2,000,000	2,000,000	2,000,000	$6,000,000
Total Benefits				**$14,000,000**
Costs				
200 Physical Servers	1,600,000	0	0	$1,600,000
80 VMware Servers with consolidation	1,280,000	0	0	$1,280,000
Maintenance on 200 physical servers	400,000	400,000	400,000	$1,200,000
Maintenance on 80 VMware servers	240,000	240,000	240,000	$720,000
Total Cost				**$4,800,000**
Net Benefit				**$9,200,000**

Resources:

Davis, David. "What Is VMware ESX Server And Why You Need It." Pluralsight, 10 Dec. 2007, www.pluralsight.com/blog/it-ops/what-is-vmware-esx-server-and-why-you-need-it.

VMware Cloud, cloud.vmware.com/vmc-aws.

"What Is VMware Server? - Definition from WhatIs.com." SearchVMware, searchvmware.techtarget.com/definition/VMware-Server.