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Flash Research Paper 2

Implementing virtual server machines into our hardware refresh cycle will save our company over \$9 million over the next 3 years. To upgrade all 1,000 servers to normal servers, we would spend \$14 million over 3 years, but choosing to implement virtual servers into the mix will only cost the company less than \$5 million over 3 years. Over a 3 year period we will see a 38% return on our initial first year investment into a virtual machine mix.

We currently have 1,000 servers in our data center that are only running at approximately 10% of their processing power. By loading VMware onto a server, we are pushing the machine to operate at near 100% processing power by running multiple 'computers' on one physical machine. We can reduce our servers at a 10:1 ratio for 80% of our data center. We will keep our critical systems on normal servers, as virtual servers are not as reliable as normal servers. Implementing virtual machines into our company can reduce 800 physical servers into 80 physical servers running ten machines per physical server. This will reduce 1,000 normal servers down to only 280 servers, 80 of which will be virtual machines and 200 of which will be normal servers.

Servers that will implement VMware cost \$16,000 each and maintenance per year will cost \$3,000 each; however we will save over \$6 million the first year the new systems are implemented and over 3 years our company will see a net benefit of over \$9 million. By reducing our need for 1,000 servers down to 280 physical servers, we will save space and energy in our data center. Virtualization allows us to operate our servers at peak performance and will save our company over \$9 million, a 38% return on our initial investment over a 3 year period.

As-Is Costs	Initial	Per year		
1,000	\$8,000	\$2,000		
Server Type - Qty	Y1	Y2	Y3	Benefit
Normal - 1,000	\$10,000,000	\$2,000,000	\$2,000,000	\$14,000,000
Vmware 10-1 Ratio	Initial	Per year		
80%				
80	\$16,000	\$3,000		
200	\$8,000	\$2,000		
Server Type - Qty	Y1	Y2	Y3	Total Costs
Vmware - 80	\$1,520,000	\$240,000	\$240,000	\$2,000,000
Normal - 200	\$2,000,000	\$400,000	\$400,000	\$2,800,000
Total Costs	\$3,520,000	\$640,000	\$640,000	\$4,800,000
Vmware Benefits	Y1	Y2	Y3	Net Benefit
	\$6,480,000	\$1,360,000	\$1,360,000	\$9,200,000

Works Cited

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