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Enterprise IT Architecture

Flash Research Assignment #2

By utilizing virtualization, our company has the opportunity to save \$9.2 million over a three year period. It would allow 80% of our current servers to run as virtual machines which would reduce the number of physical servers in our data center. By consolidating server workloads, our company will see a significant decrease in our maintenance costs.

VMware virtualization will help our company to reduce capital and operating expenses through server consolidation and automation. By consolidating, 1000 of our servers would be cut down to 280 servers, thus reducing maintenance costs as each server costs \$2000 per year for hardware and operating costs. The key capability of virtualization is that it eliminates the number of servers needed as it runs multiple operating systems on a single server.

By implementing virtualization, our company would save \$14 million over the three year period. The costs to implement this technology would be \$4.8 million, which results in a total net benefit of \$9.2 million for our company. Virtual networks have the same features and capabilities of physical networks, but results in lower costs for our firm.

	Year 1	Year 2	Year 3	Total
Total Server Cost	\$ 8,000,000.00	\$ -	\$ -	\$ 8,000,000.00
Maintenance in a year	\$ 2,000,000.00	\$ 2,000,000.00	\$ 2,000,000.00	\$ 6,000,000.00
Total	\$ 10,000,000.00	\$ 2,000,000.00	\$ 2,000,000.00	\$ 14,000,000.00
	Year 1	Year 2	Year 3	Total
Physical servers (200)	\$ 1,600,000.00	\$ -	\$ -	\$ 1,600,000.00
Vmware servers (80)	\$ 1,280,000.00	\$ -	\$ -	\$ 1,280,000.00
Total maintenance	\$ 640,000.00	\$ 640,000.00	\$ 640,000.00	\$ 1,920,000.00
Total	\$ 3,520,000.00	\$ 640,000.00	\$ 640,000.00	\$ 4,800,000.00
			\$	
			Vmware cost	4,800,000.00
			\$	
			savings	14,000,000.00
			\$	
			Savings - cost	9,200,000.00

References

Davis, David. "Top 10 Benefits of Server Virtualization -- Virtualization Review." Top 10 Benefits of Server Virtualization -- Virtualization Review. 20 June 2011. Web. 10 Feb. 2015

"Virtualization Basics." , What Is Virtualization: VMware. Web. 10 Feb. 2015.

Virtualization News. What are the Business Benefits of Virtualization? 16 January 2008. 10 February 2015