

YOGI PATEL

## VIRTUALIZATION AND CLOUD COMPUTING

Through consolidation of servers, our company can save \$9.2 million. With investing in VMware, we can consolidate 80% of our current servers as virtual servers. Server Consolidation allows us more space within our data center by decreasing the number of physical servers.

Server consolidation provides a more efficient data center. This results in fewer servers and racks inside the data centers, which would clear up more space. Currently, our data center runs on 1,000 physical servers. With virtualizing our servers, we can consolidate them to 200 physical servers. Through Server Consolidation, we can convert 800 physical servers into 80 virtual servers. Consolidating servers requires less maintenance.

Our current server system is becoming outdated. Virtualization is the new technology that saves companies lots of money. With 80 virtual servers and the 200 physical servers, our company would spend \$4,800,000, which comprises of the purchase of the servers and the maintenance for the next three years. Our company would benefit \$14,000,000 from not re-purchasing the 1,000 physical servers. In conclusion, our company would have a net three-year benefit of \$9,200,000 if we invest in Server Consolidation.

	Servers	Cost/Server	Total Cost	Maintenance Cost/Year	Cost Breakdown	
Physical Servers	1,000	\$8,000	\$8,000,000	\$2,000,000	Year 1	\$10,000,000
					Year 2	\$2,000,000
					Year 3	\$2,000,000
					<b>Total Benefits</b>	<b>\$14,000,000</b>

	Servers	Cost/Server	Total Cost	Maintenance Cost/Year	Cost Breakdown	
Physical Servers	200	\$8,000	\$1,600,000	\$400,000	Year 1	\$3,520,000
Virtual Servers	80	\$16,000	\$1,280,000	\$240,000	Year 2	\$640,000
			<b>Total Cost</b>	\$640,000	Year 3	\$640,000
					<b>Total Cost</b>	<b>\$4,800,000</b>

	Option 1: Keep Current System	Option 2: Server Virtualization	Savings/Year
Year 1	\$10,000,000	\$3,520,000	\$6,480,000
Year 2	\$2,000,000	\$640,000	\$1,360,000
Year 3	\$2,000,000	\$640,000	\$1,360,000
		<b>3-Year Net Benefits</b>	<b>\$9,200,000</b>

## Works Cited

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