## Thomas Lee Virtualization and Cloud Computing

Utilizing virtualization will save our company \$9.2 million over a three-year period. Compared to traditional servers, virtual servers have the capability to consolidate multiple servers into one, allowing our company to spend less money in maintenance costs.

The key capability of virtualization is that it can consolidate an average of 10 physical servers into one virtual server. These servers are able to be consolidated because virtualization allows a traditional server to be partitioned into multiple different parts. Since 80% of our servers can be virtualized, the company will only have to maintain 280 servers rather than maintaining 1,000. Managing virtual servers is easier than managing physical servers so decreasing the amount of physical servers will cut down the company's operating costs.

By utilizing virtualization, the company will benefit \$14 million over a three-year period. Implementing and maintaining the virtual servers will cost \$2 million; however, this transition will create a \$9.2 million net benefit over a three-year period.

## Sources

Marshall, David. "Top 10 Benefits of Server Virtualization." *InfoWorld*. InfoWorld, 2 Nov. 2011.

Web. 10 Oct. 2016.<http://www.infoworld.com/article/2621446/server-virtualization/server-virtualization-top-10-benefits-of-server-virtualization.html>.

Strickland, Jonathan. "How Server Virtualization Works." *How Stuff Works*. N.p., 2 June 2008. Web. 10 Sept. 2016. <a href="http://computer.howstuffworks.com/server-virtualization.htm">http://computer.howstuffworks.com/server-virtualization.htm</a>.

"Virtualization in Education". IBM.. N.p., 2007. 10 October 2016. Web.

<a href="http://www-07.ibm.com/solutions/in/education/download/Virtualization%20in%20Education.pdf">http://www-07.ibm.com/solutions/in/education/download/Virtualization%20in%20Education.pdf</a>>.

Traditional Servers	Year 1	Year 2	Year 3	Total
Implementation	\$8,000,000	0	0	\$8,000,000
Maintenance	\$2,000,000	\$2,000,000	\$2,000,000	\$6,000,000
Total	\$10,000,000	\$2,000,000	\$2,000,000	\$14,000,000

	Year 1	Year 2	Year 3	Total
Benefits	\$6,480,000	\$1,360,000	\$1,360,000	
Net Benefit				\$9,200,000