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Flash paper #2

Virtualization and Cloud Computing

By utilizing virtualization to consolidate server workload, our company will have a net benefit of $9.2 million over the next three years. Virtualization’s key capability of server consolidation will help us to cut back on 720 physical machines that we would otherwise need to invest in, as well as decrease our yearly maintenance expense. Due to the fact that we are at the start of a hardware refresh cycle, it is an ideal time to invest in this technology.

The key capability of virtualization is the ability to consolidate servers. Server consolidation is the process of splitting up one physical server into multiple virtual servers to efficiently utilize computer capacity. This helps to save money by cutting back on the amount of actual physical servers that are required. In our case, we believe that 80% of our servers could be run as virtual machines under VMware. This means that instead of purchasing 1,000 new physical servers, we could cut down on the need to buy 720 physical servers, and would only have to invest in 280 servers.

The cost of consolidating 80% of our servers through virtualization over the next three years would be $4.8 million, which includes the purchase cost, and annual costs for maintenance, support and cooling. The benefit of implementing virtualization would be $14,000 over the next three years, which would be derived from avoiding the purchase of all physical servers. By making this investment, we would have a net-benefit of $9.2 million over the next three years.

Works Cited

Lo, Kevin. "Virtualization 101." *Virtualization 101*. N.p., 19 Jan. 2011. Web. 10 Oct. 2016. < http://www.techsoup.org/support/articles-and-how-tos/virtualization-101>.

Rouse, Margaret. "What Is Server Consolidation? - Definition from WhatIs.com." *SearchDataCenter*. N.p., n.d. Web. 10 Oct. 2016. < http://searchdatacenter.techtarget.com/definition/server-consolidation>.

"What Is Virtualization." *Virtualization Technology & Virtual Machine Software*. VMware, n.d. Web. 10 Oct. 2016. <http://www.vmware.com/solutions/virtualization.html>

