Courtlyn Henderson

MIS 3406

Professor Doyle

10/11/18

Flash Research 2: Virtualization and Cloud Computing

By consolidating physical servers to virtual machines, our company can expect a three-year net benefit of \$9.2 million. This is called virtualization, and it allows IT to run 10 physical machines on one virtual server. We can realize this benefit because virtual machine storage is less expensive than physical storage.

The main benefit of the migration is the lower cost of storage, as virtualization requires fewer servers and related IT hardware and can reduce real estate, power, and cooling requirements. Hosting virtual machines also enables IT to have more control over the specifications, leading to more efficiency and reduced costs throughout all organizational projects. According to VMWare, "when tenants wish to differentiate their storage or move applications between test/dev and production, or when an application no longer needs the highest levels of availability, traditionally this could be quite challenging, requiring the movement or migration of physically stored data from one volume to another". The benefits of this dynamic storage will allow the organization to move to the digital age.

The initial outlay is \$2.8 million for the new physical and virtual machines compared to \$8 million for all physical machines. We will save \$2.7 million in years 2 and 3, because there are fewer servers to maintain. By moving forward with this initiative, we can expect a three-year net benefit of \$9.2 million.

Works Cited

Hosken, Martin. "Identifying and Calculating the Operational Savings of a VMware VSANTM Solution." VCloud Architecture Toolkit for Service Providers, VMware, Jan. 2018, www.vmware.com/content/dam/digitalmarketing/vmware/en/pdf/vcat/vmware-identifying-calcul ating-operational-savings-vSAN-solution.pdf.

N.A. Top 5 Ways Businesses Benefit from Server Virtualization. New Horizon Computer Learning Centers, 13 Feb. 2017,

blog.nhlearningsolutions.com/blog/top-5-ways-businesses-benefit-from-server-virtualization.

Sutherland, Chris. The Top Five Benefits of Server Virtualization, Matrix Network Services, www.ibat.org/files/PDFs/Virtualization_article_FINAL.pdf.